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CHRISTIAN ECONOMICS
VOLUME 4: SCHOLAR'S EDITION
VOLUME II

Gary North

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TABLE OF CONTENTS

Volume 1

Preface xi
Introduction 1

Part 1: Foundations

Introduction to Part 1 13
1. Presuppositions 22
2. The Covenant Model 34
3. Value-Laden Economic Theory 70
4. Epistemology 82
5. Temporal Limits to Growth 107
Conclusion to Part 1 119

Part 2: Categories

Introduction to Part 2 129
6. Purpose 140
7. Allocation 156
8. Boundaries 175
9. Imputation 189
10. Inheritance 210
Conclusion to Part 2 225

Part 3: Theory

Introduction to Part 3 231
11. Trinitarian Ownership 242
12. Initial Distribution 252
13. Redistribution 273
14. Scarcity and Costs 297
15. Diminishing Returns 313
16. Efficiency 322
17. Exchange 333

18. Economizing 346
19. Protectionism 362
20. Supply and Demand 378
21. Service and Cooperation 388
22. Competition 397
23. Plan Reconciliation 421
24. Money and Knowledge 432
25. Honest Money 450
26. State-Issued Money 465
27. Bank-Issued Money 483
28. Markets and Discovery 501
29. Predictability 512
30. Time and Interest 524

Volume 2

31. Land and Rent 539
32. Labor and Wages 548
33. Saving and Investment 560
34. Credit and Debt 572
35. Banking 589
36. Business Cycle 598
37. Economic Growth 612
38. Regulation 631
39. Patents, Copyrights, and Trademarks 653
40. Economic Laws 680
41. Economics Is Not Physics 705
42. Microeconomics and Macroeconomics 723
Conclusion to Part 3 735

Part 4: Kingdom

Introduction to Part 4 741
43. Kingdoms in Conflict 744
44. Lord's Day 757
45. Tithe 769

46. Charity 780
47. Contentment 797
48. The Calling 809
49. Bride Price 822
Conclusion to Part 4 840

Part 5: Misinterpretations
Introduction to Part 5 847
50. Prohibition of Interest 849
51. Jubilee Year 862
52. Slavery 874
Conclusion to Part 5 889

Part 6: State
Introduction to Part 6 895
53. Justice 903
54. National Defense 918
55. Bureaucracy and Taxation 929
56. Boundary Violations 948
57. Public Utilities 960
Conclusion to Part 6 972

Conclusion 976

Appendix A: From Reason to Intuition 984

Appendix B: The Heat Death of the Universe 1018

Bibliography 1047
Scripture Index 1051
Index 1058

31

LAND AND RENT

The Lord God planted a garden eastward, in Eden, and there he put the man whom he had formed. Out of the ground the Lord God made every tree to grow that is pleasant to the sight and good for food. This included the tree of life that was in the midst of the garden, and the tree of the knowledge of good and evil. A river went out of Eden to water the garden. From there it divided and became four rivers. The name of the first is Pishon. It is the one which flows throughout the whole land of Havilah, where there is gold. The gold of that land is good. There are also bdellium and the onyx stone (Genesis 2:8–12).

To Adam he said, "Because you have listened to the voice of your wife, and have eaten from the tree, concerning which I commanded you, saying, 'You may not eat from it,' cursed is the ground because of you; through painful work you will eat from it all the days of your life. It will produce thorns and thistles for you, and you will eat the plants of the field" (Genesis 3:17–18).

Analysis

In Genesis 2, we learn that God gave Adam life and resources. Adam had free access to the garden of Eden. There were rivers flowing out of the garden that would have taken him and his descendants out of the garden and across the region. We are specifically told that the river Pishon would take them to the land of Havilah, which was noted for its gold, bdellium, and onyx stone. These were raw materials they would eventually have great value, and by the time that Moses wrote the Pentateuch, the value of these raw materials was well understood.

Genesis 3 provides the account of the fall of man. It also provides the account of God's judgment on the world. The world was originally designed to enable mankind to be highly productive. But, after the fall of man, God's

negative sanction against the world involved new plants that would make man's productivity more difficult. God imposed restrictions on man's productivity. These restrictions were also restrictions on men's ability to achieve long-term per capita wealth.

The curse of the ground involved restrictions on mankind's ability to extract wealth from the land. But there had always been restrictions on extracting wealth from the land. Prior to the fall of man, mankind faced finitude. Man's knowledge was finite. Man's environment was finite. The curse of the ground in Genesis 3 added new restrictions on the ability of men to extract wealth out of the ground, but in a finite world, there is no such thing as a free lunch. For every benefit, there is a cost. Prior to the fall, these costs were not threats to mankind, but they were limitations.

The dominion covenant requires that man extend his dominion across the face of the earth. But man is not autonomous. He always acts as an agent of God, whether he acknowledges this or not. The limitations of the garden prior to the fall would have led to economic incentives for Adam and his descendants to leave the garden. There was limited space. Therefore, built into the dominion covenant was the principle known as *the law of variable proportions*. As more people began to inhabit the land, the productivity from the division of labor would initially have risen, and then it would have declined. As more human labor was added to the mix, people would have been getting in each other's way. As with any other complementary factor of production, as more labor was added to the mix, its contribution to the total output of the production process would have fallen. The marginal value of labor inside the garden would have declined.

Eventually, biological multiplication would have had the effect of reducing the living space available to families. This would have increased the value of living space inside the confines of the garden. Prices of real estate would have risen. Families would have bid against each other for possession of specific plots of land. Initially, the uninhabited land outside the garden would have been available to anyone who wanted to settle it and begin developing it. This land would have filled up soon. This would have created an incentive for families to construct inexpensive small floating barges to transport themselves and their possessions down one of the four rivers.

The more rapid this biological expansion, the more rapidly the world outside the garden would have been inhabited and put to productive use. God's promise of biological reproduction was therefore a promise regarding

the increasing value of land outside the garden. It would have paid some members of Adam's family to leave early, stake their claims to productive and desirable land, and develop it. This is the traditional role of land speculators. They forecast future demand for specific kinds of land, and they go out in search of such land in advance of immigrants into the region.

The land of Havilah had valuable resources. Adam would not have known the details of why these resources were good, but he understood that God's description of the land and its resources as being good was a reliable indicator of their future value in a growing society. God had imputed economic value to these assets, and Adam should have been confident that God's imputation was accurate.

The mineral and chemical details of these resources were not available to Adam. There was no demand yet for these resources in a competitive marketplace for scarce economic resources. Physical resources were not yet scarce because there was only Adam. He had all that he could manage inside the garden. His crucial scarce resource was time. He had to develop a plan for a sequence of development of the resources of the garden. He would have allocated his time to developing resources without any price system. Not until there were multiple families in the region would competitive bids for ownership have led to a system of prices that enabled decision-makers to allocate their scarce time and scarce resources to future productive uses. In a world of scarcity, the auction process would have developed out of any legal system that enforced the rights of ownership. The tree of the knowledge of good and evil was the supreme manifestation of the rights of ownership.

Adam knew from the beginning that he would have to restrict his consumption of the resources of the land in order to provide capital. He knew he would have to save time, and he also knew that anything he consumed would have to be replaced. He needed an investment plan. This was not an immediate problem. He was alone. But he understood that God had given a command to mankind, which would eventually be both male and female. There would be population growth. There would be consumption. Eventually, mankind would begin to run low on resources in a finite world if men were not creative in replacing lost resources through innovation and discovery. The first resource they would run low on was living space, but that was just the beginning. Therefore, the concept of land from a biblical standpoint always involves the concept of depletion. After the fall, the issue of resource depletion became even more of a critical issue. The earth now re-

sists mankind's attempts to extract wealth out of it. Scarcity is now cursed. What had been a relatively minor problem before the fall became a major problem.

A. World Trade Incentive

God said that the land of Havilah was good. He did not say anything comparable about the rest of the earth. This indicated from the beginning that there were variations in the value of land. Some pieces of land would be more valuable than others. Some resources found in the specific plots of land would be more valuable than resources in others. In describing the promised land, Moses spoke of it in these terms: a land flowing with milk and honey. This meant that other lands were not flowing with milk and honey. God would give Israel the best land available.

Because different lands had different assets, it was inevitable that a division of labor would develop. Specialization of production would develop. People living in one region would gain a competitive advantage by specializing in the extraction of local raw materials and assets constructed with these raw materials. People would profit from trade with people who lived in other regions. By specializing in production, they would increase their output per unit of resource input. That is because geologically unique resources locally would be able to be extracted at a lower cost than what comparable resources could be extracted for in other regions. The world would have more resources at its disposal because of this regional division of labor.

Transportation by water remained the least expensive form of transportation until the development of railroads in the second quarter of the nineteenth century. The four rivers flowing out of the garden of Eden would have carried people downstream until they found land that was suitable for their particular talents. The combination of specialized skills of production and an unequal distribution of resources across geographical areas would have led to an even greater specialization of production and division of labor. People were different. Resources were different. Costs of transportation were different. Even before the fall, these differences would have led to an extensive development of lands outside the garden. Humanity would have spread out across the face of the earth in pursuit of greater output per unit of resource input. People search for bargains, and there are few bargains as desirable as low-cost land containing scarce resources that will have high future value.

Initially, there would not have been monetary bidding for land outside of the garden. There were not yet enough people to bid against each other. The quantity of locally available land would have been high in relationship to the number of people. Under these circumstances, land has low value, and human labor has high value. People assess their skills and opportunities, and they invest time in developing these skills. The rate of return on the investment in skills is greater than the return on the investment of land wherever land is in abundant supply and human labor is not. In modern times, the greatest disparity between the value of labor and the value of land was in the United States from about 1800 to 1900. The Great Lakes provided low-cost transportation for agricultural products. Then came the invention of the railroad. Within one century, Americans filled the nation. Land west of the Allegheny mountains was the highest value, lowest cost land in the world in 1830. Labor was valuable by comparison. Millions of people came across the Atlantic Ocean to claim ownership of this land, especially after 1875 with the development of the steamship. It got cheaper to cross the Atlantic. Biological reproduction rates were always high in the United States. The railroad system constantly raised the value of land as it spread across the nation after 1840. The transcontinental railroad connected the coasts after 1869. In 1800, the population was about five million. In 1900, it was 75 million.

B. Rent and Capitalization

You are familiar with the phenomenon of rent. It is associated with real estate. But rent as an economic category is not limited to real estate. Economic theory is marked by extending the economics of rent to the economy in general. It understands the economics of land rent as an application of a more general economic principle. It is time to discuss this more general economic principle.

1. A Stream of Services

When someone buys a capital asset, such as a household appliance, he is buying a stream of expected services. He may pay cash for the machine, but he is not buying the machine for its own sake. He is buying a stream of services that the machine is expected to provide. There may even be a written guarantee that the machine will supply such services over a specific period of time. This is no different conceptually from buying a piece of land

that is expected to supply services over time. People pay in advance for an expected stream of services.

When people buy a plot of land, they calculate in advance what they think the hoped-for services or benefits of the piece of land will provide over the period of ownership. This may be ten years. It may be a century. Buyers subjectively impute value to this stream of income. They cannot be sure that the stream of benefits will be continual. They may have to intervene in order to repair the land in some way. There are always unforeseen events that disrupt our expectations. Nevertheless, people estimate what they think the benefits will be from owning a piece of land. It may be the equivalent of an ounce of gold a year. It may be the equivalent of ten ounces of gold a year. They do not wish to pay more for the land than the expected value of the stream of income that the land will provide.

2. The Rate of Interest

We cannot escape the rate of interest. We discount by the rate of interest the value of any expected future stream of income provided by any asset, including land. This is because the present value of a distant stream of income is worth less than the present value of a more immediate stream of income. This is not just a matter of risk. It is not just a matter of the possibility of the interruption of an expected stream of income. This is more fundamental. We discount the future expected value of every stream of income.

If someone is considering the purchase of a piece of land that he expects will deliver an ounce of gold a year in benefits, and he thinks these benefits will continue for 50 years, he will not pay 50 ounces of gold to buy the land today. Why should he? He already has all of the benefits that 50 ounces of gold will buy today. He is responsible for the use of that money today. *Personal responsibility is greater in the present than in the future.* The responsibility associated with the allocation of scarce resources is immediate, not in the future. We are held accountable by God for the allocation of His resources while we own them. The opportunities are immediate, not merely in the future. So, we place greater value on present opportunities than future opportunities. *God expects an immediate rate of return on his capital.* He wants that capital's value to grow steadily between now and then. Therefore, the value of His resources had better turn out to be greater in the future than they are in the present. So, we discount the future in comparison with the present. When we are buying a present resource in order to gain a

future benefit, we expect a benefit of greater value in the future than what we surrender in the present. This is what God expects from us. So, if the present value of the expected stream of income is one ounce of gold a year, we discount the present value of all those hoped-for future ounces of gold. Those future ounces are not worth as much today as the same number of ounces are worth today.

3. Capitalization

When I say "capitalization," I mean this: you can buy a stream of income, which is a fixed rent over a period of time. It does not matter what the source of this stream of income is if the risk of default is the same. The mathematics are the same in both cases. You must factor in the interest rate to make an accurate calculation. If a piece of land is expected to generate a monthly stream of income of 1,000 currency units for over 30 years, and a 30-year bond is expected to generate the same amount of monthly income for 30 years, the present price of the bond will be the same as the present price of the piece of land. If you can get the same income from a bond as you can get from a piece of land, you should not pay more for the piece of land than you pay for the bond. If you did, you would be throwing away money. God does not want us to throw away money. It is His money. To see what you should pay, use a financial calculator. Here is what to enter. **N** = 360 (number of months), **I** = 5 (annual interest rate = 5%), **PMT** = 1000 (monthly payment). Solve for **PV** (present value, i.e., what you should pay today). Answer: -186,281.62. The number is negative because you must pay it. It is outflow. In order to purchase a stream of income totaling 360,000 currency units over a 30-year period at 5%, you should not pay more than 186,281.62. *These numbers are the same whether you are buying a bond or a piece of land.*

I use this example to show that the rate of interest applies in exactly the same way to any stream of income. The mathematics of this process are not understood by most people. With free online financial calculators, investors today can learn about the effects of interest on transactions. This has opened up the world of finance to anyone who wants quick answers to what used to be highly complex transactions that were understood only by specialists in finance. The cost of this previously arcane knowledge has fallen. The barrier to entry has been lowered substantially by financial calculators. The many uses of these calculators are taught online for free. The formulas that make possible these calculators do not have to be known by the people

using the calculators. Finding answers is simply a matter of entering numbers. This means that a crucial process in estimating the impact of time (interest) in financial affairs has been revealed to people with normal intelligence. They can cross this barrier with information that is free online. This is a far lower barrier to entry than existed in the days when discount numbers were available only in pages of tables in obscure manuals used by bankers and sophisticated investors. Before these tables, there were formulas that only a handful of specialists knew. Step-by-step, a working knowledge of the time value of money is being made available to people of average intelligence who want to make wise economic decisions. This is a tremendous benefit that the free market has made available to the public.

Conclusion

God provided mankind with capital. The primary form of capital is redemption: special grace. Next comes life. Next comes knowledge. If we regard responsibility as a burden and a liability, then we do not see it as capital. But if we regard it as the Bible regards it, as an opportunity to serve a holy God, then responsibility is capital. It is opportunity. *There is no opportunity without responsibility.* The goal of the dominion covenant is to increase mankind's exercise of personal responsibility in history and eternity. Responsibility is a permanent condition of mankind. The opportunity to learn more is an opportunity to exercise greater responsibility. This increase is an aspect of spiritual maturity. Old age, which is universally regarded as a liability, is primarily marked by a decrease in people's ability to exercise responsibility. Their income declines because their ability to make responsible decisions declines. We think of the liabilities of old age mostly in terms of reduced physical capacity. But the risk of Alzheimer's disease, which increases as we get older, reminds us that the far greater liability associated with old age is the decline of knowledge and therefore the decline of responsibility.

We should interpret God's grant of land to Adam and Eve in the context of the dominion covenant. This land grant should not be understood apart from the issues of ownership and personal responsibility. Land is a tool of production. Knowledge is a greater tool of production. Land is physical. Knowledge is not. To make land productive, people need highly specialized knowledge. But this is also true of every grant of resources by God to man. *Knowledge is far more universal in wealth creation than land is.*

In the history of mankind, land has generally been seen as the primary economic resource. This was because most people earned their living from the land. Their specialized knowledge was focused on the land. This has become far less true since about 1900, as economic growth has become more clearly based on knowledge in the form of technology and innovation. But the centrality of technical knowledge and entrepreneurship was always the case. It was always entrepreneurship, vision, and innovation that converted the raw materials buried in the land into productive resources. This is another way of saying that *it was knowledge that converted land into wealth*.

Wealth comes in the form of streams of income. This is another way of saying that wealth comes in the form of rent. Modern man still associates rent with land, especially housing, but this is a matter of history rather than economic analysis. Economic analysis applies the economics of rent, which includes the discounting of the value of future streams of income by an interest rate, to all forms of income-generating assets.

The vast majority of mankind in history learned the principles of rent and capitalization by means of economic decisions associated with agriculture. A minority learned these principles in mining. This was not true of traders, but traders have always been a minority in the human population. Land became the primary arena of economic competition, and therefore it was the schoolmaster of economics. This began to change in the middle of the 1800s, and this change has accelerated ever since. Very few people generate streams of income through agriculture today. The enormous efficiency of technology in agricultural production has reduced the percentage of people who obtain their income from agriculture to low single digits in industrial nations. As wealth spreads into poverty-stricken rural areas in the Third World, this same transformation will take place. Land will no longer be the schoolmaster of economic principles in Third World nations. It has not been the schoolmaster in the West since 1900.

32

LABOR AND WAGES

For the kingdom of heaven is like a landowner who went out early in the morning to hire workers for his vineyard. After he had agreed with the workers for one denarius a day, he sent them into his vineyard. He went out again about the third hour and saw other workers standing idle in the marketplace. To them he said, 'You also, go into the vineyard, and whatever is right I will give you.' So they went to work (Matthew 20:1–4).

Analysis

I have discussed this in Chapter 47 of my commentary on Matthew. This is one of Jesus' pocketbook parables. He used economic stories in order to convey spiritual truths. This parable surveys the history of God's kingdom from God's covenant with Abraham until the time of Jesus. It is a story of the resentful workers who were hired early in the day and had to work all day. At the end of the day, all of the day's workers were paid the same: one denarius. The workers who had been hired early in the day complained. They were being paid only what latecomers were being paid, who did not have to work all day long. The workers in the early morning represented the nation of Israel. God was now making available membership in the kingdom to those who had not been serving God from the days of Abraham. The gentiles were latecomers. Jesus used this parable to teach a lesson about Israel's resentment.

The parable would have made no sense to the listeners if they had not understood the nature of the bargaining process in the labor markets. This bargaining process rests judicially and morally on the concept of private property: *the right to make a contract*. "But the owner answered and said to one of them, 'Friend, I do you no wrong. Did you not agree with me for one denarius? Take what belongs to you and go your way. I choose to give to these last hired workers just the same as to you. Do I not have the right to do as I want with what belongs to me? Or are you envious because I am

generous?'" (vv. 13–16a). *This passage is the strongest affirmation of private property in the New Testament*. It is rarely quoted in this context. The owner of the field asked a rhetorical question: "Do I not have the right to do as I want with what belongs to me?" He followed it with a non-rhetorical question: "Or are you envious because I am generous?" This affirmation of the moral and legal right of the ownership of private property stands as an affirmation of the legitimacy of the free market's process of allocating resources. This economic message continues to alienate critics of the free market. They are hostile to the concept of voluntary bargaining.

As the day grew shorter, the field owner maintained his original offer: one denarius. This meant that the hourly wage was going up. Because it is a parable about the kingdom, is a parable about the grace of God. But the context of the parable was clear: the field owner had employment for these workers that he believed would be profitable for him. The early workers were paid less per hour, but they had held a guaranteed job for the day. There was no risk of unemployment. They did not know that he would be back later in the day to make offers to different groups of workers. If they had known this, some of them might have delayed accepting the offer. But they wanted guaranteed income. They were not willing to risk the possibility that he would not return later in the day to make the same offer.

The employer did not know for sure that there would be available workers later in the day. Therefore, he also did not have perfect foreknowledge of the future. *Ignorance is basic to all negotiating*. The parties on either side of the negotiating table do not have perfect knowledge of what the parties on the other side are willing to accept or offer. As with all other areas of economic theory, *imperfect knowledge is fundamental to the market process*. Any attempt to explain the market process in terms of perfect knowledge, or in comparison with the supposed efficiencies of perfect knowledge, is based on self-deception. Sadly, this approach to explaining the market process is basic to modern economic theory, and it is categorically incorrect. It is called equilibrium. It rests on an assumption: the analytically correct standard of economic efficiency is omniscience. This is available only to God, which is why equilibrium analysis is incorrect.

The laborers were owners of their skills. They had a legal right to come to an agreement with someone who was willing to hire them. The employer was the owner of money. He had a legal right to come to an agreement with someone who was willing to work for him. The laborers had a right to sell

their skills for money. The field owner had a right to hire those skills for money. *The right of ownership is always the right of disownership.* It is the right to allocate whatever it is that you own. You exchange ownership on your terms. So does the other party to the transaction. Buyers and sellers adjust their plans in terms of a particular price. If they cannot find a way to adjust their plans in terms of the initial price offered by the seller, then they may come to an agreement in terms of a different price. Or they may come to an agreement in terms of different terms of payment. There is the possibility of negotiation.

In the parable, there is no mention of other employers who were willing to make an offer to workers. The parable was illustrating the kingdom of God. God has a monopoly over the kingdom. He has a monopoly over who gets access to it. So, it is not a sufficient parable for discussing the market for labor. But it is sufficient in discussing the right of buyers and sellers to make an exchange of valuable assets. It is sufficient in discussing the right of ownership, which is always the right of disownership.

A. Labor Services

Under the Mosaic law, it was legal for somebody to sell himself into permanent slavery (Exodus 21:5–6). This is no longer the case in the modern world, although there is no reason from a biblical standpoint why such an agreement would be either immoral or illegal. The New Testament is clear that it is best not to be part of such an arrangement. Paul said that if a slave owner should offer manumission to his slave, the slave should accept the offer. "Were you a slave when God called you? Do not be concerned about it. But if you can become free, take advantage of it" (I Corinthians 7:21). [North, *First Corinthians*, ch. 8] I argue that the reason for this is that an individual who is delivered out of slavery increases his personal responsibility. This is a fundamental goal of the dominion covenant.

In the modern world, people sell their labor services. Salaried people do this at a fixed salary per hour. Some people work by the hour. Other people work on a piece-rate basis: payment for units of output. They sell their services for money. This means that they are in a weaker bargaining position than the employers are. Employers own money. Money is the most marketable commodity. This means that it conveys to the owner a wide range of potential purchases. In contrast, laborers have specific skills to sell in a limited geographical area.

Workers are not helpless. Labor is by far the most versatile factor of production. A complex machine can be used for only one purpose. If the market for the output of the machine shrinks, the value of the machine declines, and therefore the price of the machine declines. This is also true of labor services, but labor services are far more versatile than a complex machine. People can find other ways of making a living. So, when the market for labor services declines, there is a reduction of demand, and competition among laborers forces down salaries. But in a market with a high division of labor, there are employment opportunities for almost all workers. Of course, this brings forth the economists' favorite qualification: *at some price*.

A worker needs income or capital in reserve in order to support himself and his family. He is usually not in a position to bargain with the same degree of authority that an employer is. The worker has a narrow set of skills. He also has a narrow geographical area in which he can use these skills if the skills are based on manual labor. In contrast, the employer has money. He can offer sufficient money to recruit laborers from outside the immediate geographical area. He probably has capital in reserve. He is in a stronger bargaining position than the laborer is.

B. Pricing Labor Services

The process of pricing labor services is the same as the process for pricing all other scarce economic resources. Buyers compete against buyers. Sellers compete against sellers. This reduces the range of ignorance in specific circumstances. There is always some degree of ignorance, but the wider the range of competition, the less ignorance there is. The objective reality of market prices reduces the range of ignorance.

1. Value Paid for Value Received

An employer will not hire a laborer if he thinks it is going to cost more to keep him on the payroll then the value of the output of the laborer's labor services. He does not want to lose money on the transaction. If he can keep more money by doing nothing, he will do nothing. But the employer believes that future consumers will be willing to pay more than he pays for specific labor services. There has to be a spread between the expected costs of employing a laborer and the expected return on the expenditure.

Economists use technical language. They say that the *expected marginal value* of a specific labor service in a competitive market will be equal

to the expected marginal value of the price paid by a final consumer. There is no way for an employer to assess this with precision. It is a guess. It is an *entrepreneurial guess*. It is a well-informed guess, but it is a guess. Any attempt to represent this transaction by means of a graph or an equation is spurious. Academic economists have been trained so long to use formulas, equations, and graphs to convey economic knowledge that they do not tell the students that most of this process on the part of the entrepreneur is guesswork. There is insufficient precision to justify the use of a graph. But the graph is more important to academic economists than the truth of the underlying relationship that is supposedly expressed by the graph.

The worker accepts the best opportunity that is available to him at the time that he makes a decision to go onto the payroll of a company. He has the right to quit later on. He has the right to accept a better offer unless he has signed a contract prohibiting this. Such contracts are common in professional sports and the entertainment industry. They are not common outside these areas of the economy.

2. Competition and Knowledge

In a competitive market, employers compete against employers. Employees compete against employees. Out of this competition comes an array of prices for various labor services in various markets. Competition keeps the participants from making major mistakes in pricing scarce resources, and this includes labor services. Employers are not deliberately going to pay workers more than they must pay in order to keep the workers from accepting offers from other employers. Similarly, workers are not going to accept salaries that are lower than the best offers made by another employer. The more accurate the price information, and the more widespread the price information, the narrower the range of negotiation between employers and employees.

In the parable of the field workers, there is no mention of another employer. There was no open competition among employers to hire workers. The employer made them an offer: take it or leave it. They all took it. He offered them opportunities to engage in productive work in exchange for a fixed payment for the day's work. He honored his contracts with all of the workers.

There was a biblical requirement that is not found in the modern world. An employer had to pay his workers at the end of the day. He could not refuse

payment overnight. "You must not oppress a hired servant who is poor and needy, whether he is of your fellow Israelites, or of the foreigners who are in your land within your city gates; Each day you must give him his wage; the sun must not go down on this unsettled matter, for he is poor and is counting on it. Do this so that he does not cry out against you to the Lord, and so that it not be a sin that you have committed" (Deuteronomy 24:14–15). [North, *Deuteronomy*, ch. 61] This law recognizes that some workers have no savings. They are at a competitive disadvantage in relation to those workers who do have savings. The workers who do have savings are in a position to offer an employer an advantage: he does not have to pay them immediately. The Bible makes it clear that this is an illegitimate bargain. It is one of the few cases in which a limitation is placed on bargaining. There was no civil law against it in Mosaic Israel, but there would have been an ecclesiastical law against it.

It is not illegal for an employer to offer to pay in advance for labor services. Perhaps he will pay two weeks in advance. He can pay a month in advance. He bears the risk that the worker will accept payment, but then not show up or else work poorly. The bargaining is asymmetrical. The employer bears a greater risk than the employees.

In a developed market in which there are numerous employers, workers can be confident that they are probably being given a reasonable offer by an employer. Only if their work is highly skilled and narrowly specialized, thereby leading to some degree of uncertainty about what their work is worth in the marketplace, is there face-to-face negotiation in which one of the two parties may gain a significant advantage. The worker does not really know what he is worth to the employer, and the employer is not sure how little money the worker will accept as payment. There is room for negotiation in these circumstances. This is often the case with highly skilled athletes in professional sports. This is why, in the United States, highly skilled athletes employ agents to negotiate for them. The agents are skilled at negotiating. They receive a percentage of the athlete's salary. But for common laborers, there is not much negotiating. Neither side of the transaction devotes a lot of time or effort to the negotiating process. This is because wage rates for specific kinds of labor are widely known by employers and employees. *The range of ignorance is much narrower, so the salary range subject to negotiation is much narrower.*

Salaries and employment conditions can change when final demand by consumers changes. In times of recession, wages are generally stable by

tradition, but employees get fired. If wages were more flexible, fewer employees would get fired. If the business' management persuaded them to accept lower wages, the total wage bill will be reduced. The business would not have to fire anybody. Also in a recession, newcomers in the marketplace find it difficult to get job offers at wages that prevail for existing employees. They have to be superior workers in order to earn the same wage as somebody who is already on the payroll. In contrast, in times of rising economic output, wages generally rise. This is because of competition from other employers who are attempting to bid away talent that is on the payroll of a particular company.

C. Capital Increases Labor Productivity

When workers are provided with improved tools of production by their employers, their output increases. When output increases, workers become beneficiaries, either directly because of increases in their wages, or else indirectly because they can purchase more goods and services even though their wages have not increased nominally. These benefits spread beyond the limited number of workers who have been provided with additional tools of production. These benefits spread to consumers. This increases the wealth of nations, which in turn enables consumers to save money for additional capital creation. Society benefits from positive economic feedback.

The classic example is the Ford Motor Company in 1914. Early in the year, the company doubled wages to $5 a day. The development of the production line in 1913 had vastly increased the output of automobiles. While the level of skill required to become part of the assembly line process was reduced, the disincentives associated with assembly-line production were so great that Henry Ford decided to double the hourly wage schedule. The experiment was immediately productive. Absenteeism ceased. Very few workers quit their jobs. They could not get comparably paying jobs in the region. It had required enormous capital investment on the part of the Ford Motor Company to create the production lines, but the workers benefitted greatly from this investment.

1. Specialized Labor

Increased capital investment enables workers to increase their output. They do so because the capital increases the specialization of labor. Specialized labor is more productive than nonspecialized labor. Workers can sat-

isfy consumer demand more effectively. As innovations in capital and production spread, they get copied. Other workers are then equipped by their employers with better tools, and these workers also increase their productivity. Some of this increase will produce greater income for business owners who innovated. Inventors of new tools will also be rewarded. In other words, all of the net productivity that is derived from increased capital investment does not flow to workers.

There are times when better tools can be used by common workers who will not need additional training. The more that these workers are replaceable, the less they will receive as their share of the increased output. If there are lots of competitors for their jobs, this increased productivity will benefit the owners of capital more than it will benefit the users. Usually business owners who wish to persuade workers to change their ways and learn how to use new equipment have to offer increased benefits for making the changes. People do not like to change their behavior. It is easier to do things the old way. They need incentives to persuade them. Higher wages are the obvious incentives in labor contracts. The more specialized the tools of production, the more specialization is required by the workers who use these tools. They must have greater knowledge. Employers must pay premiums over the prevailing wage structure in order to attract efficient users of these tools.

We can see this in the examples of Jesus' early recruits. "When he was walking beside the Sea of Galilee, he saw Simon and Andrew the brother of Simon casting a net in the sea, for they were fishermen. Jesus said to them, 'Come, follow me, and I will make you fishers of men.' Then immediately they left the nets and followed him. As Jesus was walking on a little farther, he saw James son of Zebedee and John his brother; they were in the boat mending the nets. He called them and they left their father Zebedee in the boat with the hired servants, and they followed him" (Mark 1:16–20). When Jesus recruited Simon and Andrew, that ended their family fishing business. They were specialized businessmen, and they left that business in order to follow Jesus. They were partners with James and John (Luke 5:7–10), who also left the business behind.

They left their father Zebedee in charge. Presumably, he also acted as a trustee for Simon and Andrew. We presume this because, after Jesus' death, He appeared to Simon Peter and other disciples, including the sons of Zebedee. Peter had returned to his occupation as a fisherman. He decided to

go fishing, and he got into a boat (John 21:1–4). Presumably, it was his boat. He did not ask permission. So, it had not been sold. When the four men initially departed with Jesus, Zebedee would have had capital: two boats and two sets of nets. These nets had to be repaired from time to time, which his sons had been doing. He would have had to pay a wage to at least four people who could perform the same skilled tasks. To do this, he would have to pay wages high enough to lure four fishermen away from other employers. Their wages would have to be competitive because there would be bidding between Zebedee and the other employers. There would also be bidding among candidates for the replacement jobs.

The capital investment of having boats and nets increased the total output of the partners' joint business. This capital enabled them to catch more fish. This in turn led to an increased quantity of fish in the community. Their capital increased their wealth, the wealth of their father, the wealth of their employees, and the wealth of members of the community.

Jesus did not have to offer the four disciples wages in order to recruit them away from their careers as fishermen. He would now teach them to become fishers of men. This would be a nonprofit venture. The four men gave up their income as fishers of fish in order to become fishers of men. This was a cost of becoming a disciple of Jesus. Their opportunity costs of abandoning their jobs were whatever they would have earned. But it was nothing compared to the cost that Levi/Matthew paid when he abandoned a box of money when he left the job as a tax collector (Matthew 9:9; Luke 5:27–28). Later, three of the four recruits wrote documents that helped shape Western civilization. All four will be remembered for eternity. This was the most important thing they could do in which they would have been most difficult to replace. *Their callings were more important to them than their jobs*. They were not motivated by money.

As capital spreads through the economy through competition among employers, productivity is likely to raise per capita output. Competition among the employers benefits the employees. The greater the knowledge component of any capital improvement, the greater the benefit to those employees who qualify to use the capital. There is always a premium paid for skilled knowledge. Increased investment increases the number of jobs in which skilled knowledge is required. The existence of higher-paying jobs that require specialized knowledge is an incentive for people to invest in the education required to gain this knowledge. *Knowledge is a complemen-*

tary factor of production. Its value rises when there is increased investment in capital.

2. Unemployment

Improved output puts pressure on those workers who do not have capital or do not have the knowledge required to use capital. This is what took place in agriculture from 1800 until the present. The number of workers on farms has fallen steadily. The output of those who remain on the farms has increased, but even here, the Pareto 20/80 distribution is dominant. Only the top producers are able to prosper. This forces those who are not efficient producers to leave the farms and go into other lines of work. They must specialize in other areas in which they have an advantage. The constant improvement of capital increases output, which leads to price competition. Per capita wealth rises in the society as a result.

Throughout the period of the Industrial Revolution and the communications revolution, there has been great fear that increased output will lead to widespread unemployment. So far, this has not taken place. The fear is that the increased productivity of a handful of workers who have been equipped with capital will produce unemployment in those sectors of the economy that have not kept pace with capital development and its associated rising skill sets. This fear today underlies criticism of robotics and algorithms: digital innovations, which are much more rapid and widespread than innovations in the past. But, so far, society has benefitted from increased output, and a rising rate of unemployment has not resulted from digital/technical innovation. New jobs have been created by these innovations, especially service jobs.

D. Leisure

Employees have uses for their time other than working for a wage. They can go home early, and they can do what they want with the rest of the hours in their day. Leisure is therefore a consumption good. It is a very special form of consumption good. It is not taxable. Earned income is subject into an income tax in most nations. *Leisure is not subjected to any tax*. It is therefore highly competitive with taxable income.

When the owner of an asset decides to keep the asset rather than sell it or rent it, economists call this *reservation demand*. The most widespread form of reservation demand is leisure. This means that there is no such

thing as free time. Whenever someone spends time on something other than earning a living, it costs him the forfeited income of whatever else he could do with his time. He gives up something of value in order to enjoy what is inaccurately called free time.

Leisure is not counted as part of gross national product. There is no way to estimate the value of leisure. So, economists ignore it. They count only the income generated in the form of wages. This is misleading. When a society gets richer, most workers increase their consumption of leisure time. If people want to consume time in the present in preference to consuming greater wealth in the future, this is a present-orientation. If they consume leisure today at the cost of not working extra hours, then they will be poorer in the future than they would otherwise have been. People with high time preference make this decision.

It is a mark of a society experiencing economic growth that employees put in longer hours than employees in a society in which people enjoy greater leisure. *A biblical society will be marked by long work hours.* Jesus said this: "We must work the works of him who sent me while it is day. Night is coming when no one will be able to work" (John 9:4). These extra work hours need not be salaried. They were not salaried for Jesus' disciples. But they are work hours. This is what the dominion covenant requires. This outlook is marked by a phrase popular in the United States: "You have to work only half a day to be successful. It doesn't matter which half."

Conclusion

Labor is a factor of production. It is the most versatile of all factors of production. People can use their skills to supply many kinds of services. They can learn new skills. This makes them flexible in seeking employment. They can adjust their wage demands in terms of the state of the economy. In recessions, they can reduce their wage requests; in booms, they can increase their wage requests.

The market's process of competition tends to pay workers the equivalent of their output in the process of production, just as it does with every factor of production. Economists say that the marginal price of this output tends to equal to the marginal price paid by consumers for the output of employees. *Analytically, consumers (final buyers) determine what every factor of production is paid.* They do not sit down and estimate what should be paid to every factor of production. They simply decide to buy or not buy the

goods and services placed before them. In making this choice, they reward those producers who meet their requirements. This favors particular lines of production.

Competition for factors of production continues among employers. Through this bidding process, successful businessmen are in a position to bid away factors of production from their competitors. They are in a position to do this because, in the past, customers have rewarded them by purchasing their output. These businesses build up capital reserves. They have lines of credit that unsuccessful businesses do not possess. They are successful bidders for raw materials, labor, and capital. Consumers have enabled them to be the successful bidders in the marketplace. Consumers are in positions of authority because they have money to spend: the most marketable commodity. Those businesses that benefit from their expenditures also have money. This puts them in a strong position as employers.

The greater the supply of capital invested in production, the higher the wages paid to employees. Increased capital investment increases workers' output. Because they know how to use the tools of production, which are specialized, their value in the production process rises. In order to keep them on the payroll, employers must offer them wages comparable to the wages offered by rival employers.

A highly future-oriented society is marked by long hours on the job or on the calling. The price of this dedication is forfeiting whatever benefits leisure would have offered. A highly present-oriented society is marked by lots of leisure activities, especially digital entertainment. The individual's price of this leisure is the wealth and the dominion that he will not attain because of the hours that are not invested in either his job or his calling. There is always a trade-off. There is always a price to pay. There are no free lunches. There is no free time.

33

SAVING AND INVESTMENT

Let Pharaoh appoint officials over the land, and let them take a fifth of the crops of Egypt in the seven abundant years. Let them gather all the food of these good years that are coming and store up grain under the authority of Pharaoh, for food to be used in the cities. They should preserve it. The food will be a supply for the land for the seven years of famine which will be in the land of Egypt. In this way the land will not be devastated by the famine (Genesis 41:35–36).

Now there was no food in all the land; for the famine was severe. The land of Egypt and the land of Canaan wasted away because of the famine. Joseph gathered all the money that was in the land of Egypt and in the land of Canaan, by selling grain to the inhabitants. Then Joseph brought the money to Pharaoh's palace (Genesis 47:13–14).

Analysis

I have discussed this in Chapter 33 of my commentary on Genesis. This is the most famous story of entrepreneurship in ancient literature. God had given Pharaoh a dream. Pharaoh could not interpret it. His cupbearer remembered that Joseph had interpreted his dream and the baker's dream two years earlier. He told Pharaoh about Joseph. Pharaoh brought Joseph up out of prison to interpret the dream. This was the famous dream about the seven fat cattle and the seven thin cattle. Joseph interpreted the dream as follows. There will be seven highly productive agricultural years, and they will be followed by seven years of famine. Pharaoh believed Joseph, and asked Joseph for advice. Joseph provided this advice. Pharaoh agreed with it, and he appointed Joseph as second-in-command in the nation. Joseph administered a program of state-enforced savings.

1. Egypt and Canaan

The dream proved to be accurate. In the first year of the famine, Joseph

took advantage of the enormous stores of grain that he had collected during the previous seven years. The text says that there was no food in Egypt and Canaan in the first year. "Now there was no food in all the land; for the famine was severe." It cannot mean that there was no food at all. Jacob had enough grain to send his sons to Egypt in search of grain in year one (Genesis 42). This indicates that the famine was not total in Canaan. The sons had food reserves for the journey. Their large households remained behind. God's promise to Abram said that the Canaanites would occupy the land until the family of Abram returned from Egypt. "In the fourth generation they will come here again, for the iniquity of the Amorites has not yet reached its limit" (Genesis 15:16). The Canaanites controlled the Promised Land during the time of Jacob's descent into Egypt. They were sufficiently numerous so that Israel could not completely defeat them with an army of 601,000 (Numbers 26:51). This indicates that the famine did not last seven years in Canaan. There is nothing in the text of Genesis to indicate that Joseph sold grain to Canaan after year one. There is also no evidence that the famine persisted in Canaan after year one. The famine was thereafter confined to Egypt. It was God's judgment on Egypt, not Canaan. The famine in Canaan had this purpose: to lure Jacob into Egypt, thereby fulfilling God's prophesy to Abram.

We are also not told that Egypt's annual famines meant no food grown in the six years that followed. Joseph had collected 20% of the total output of Egypt's farms. The stored-up grain would not have sufficed to feed the people of Egypt for six more years if there was no food grown at all. Then how did Pharaoh's grain reserves last for seven years? A reasonable explanation is this. The grain that Joseph sold them was what we call *seed corn*: grain that had to be planted for the next year's crops. Families consumed most of their land's meager output each year. They had insufficient grain for planting. Joseph supplied it. It was Egypt's capital. It kept Egyptians alive.

2. Joseph's Entrepreneurship

Joseph knew what was going to come over the next 14 years. At least, he knew in general terms: seven fat years followed by seven lean years. This information was sufficient for him to devise a plan of action. Pharaoh would use coercion to collect a tax of 20% of the grain for seven years. Joseph would put the grain into enormous warehouses. Then he would wait for the famine to strike. It struck exactly on schedule. So, from the point of view of

entrepreneurship, Joseph was the greatest entrepreneur in history. He knew what would happen to the nation, and it did. He had a plan of action to deal with the problem, and he executed it. The plan of action was successful. At the end of the process, Joseph had purchased all of the land of Egypt, except only land owned by the priests, in the name of Pharaoh. He then imposed a permanent 20% income tax on the Egyptians.

In the seven good years, the 20% tax was not an extreme imposition by the state. There was plenty of food for the people of Egypt. Joseph imposed a system of forced saving on the nation. It was not sufficient that he knew what was going to come in terms of prosperity and famine. He also had to have a plan of action. This plan of action had to be funded. It was funded by the power of the Egyptian state. The state confiscated 20% of the output of the farmers. It put the grain reserves aside. It did not spend grain to increase the military power of the state. Joseph used the grain exclusively for the purpose at hand: to prepare for seven years of famine. Here was a case in which the interest of the state's senior planner was in accord with the long-term interests of the people. Had Joseph not interpreted the dream correctly, and had Pharaoh not appointed him to administer the program, the people of Egypt would have starved. It was not in their long-term interest that they starve.

The value of the grain confiscated by the state would otherwise have been owned by the people of Egypt in years one through seven. So, the people of Egypt could not use this grain to buy consumption goods. They could not exchange it with purchasers of grain who came to Egypt from Canaan and other nearby nations. There is no question that this reduced consumption on the part of the Egyptians was what financed the creation of grain reserves for the days of famine. Joseph's program relied on the productivity of the people of Egypt in the seven fat years to fund the creation of grain reserves for the seven lean years. This was not a program of stones into bread. It was a program of forced saving by the state. The state acted on behalf of the Egyptians in the seven lean years. As it turned out, it also acted on behalf of the family of Joseph, which came into Egypt out of Canaan when the famine struck Canaan. But Joseph did not know this in advance. He was acting on behalf of the people of Egypt.

The people of Egypt restricted their consumption in the seven fat years. This capitalized the program of national saving that Joseph had devised. *There could be no capital creation apart from saving.* Someone had to pro-

vide the grain that would serve as the economic salvation of the nation in the seven lean years. There are no free lunches in life.

Joseph's national saving program corresponded to Pharaoh's dream. It was not just that Joseph had accurate information in advance regarding the next 14 years. It was that he also had the power of the state to collect the reserves required to save the nation in the seven lean years. There was a program of forecasting. This was provided by the dream. There was a plan of action. It included a program of saving. This was provided by Pharaoh's appointment of Joseph as the administrator of the program. *There was consistency between the entrepreneurial forecast and the entrepreneurial plan of action.*

If there had been no dream, or if Joseph had not been called out of prison to interpret the dream, there would have been no entrepreneurial vision. God provided this vision. It was an accurate economic forecast of the future. This was unique in ancient history. The interpretation was clear to Joseph. It was clear to Pharaoh. But, in and of itself, it would not have saved the people. There had to be a way to fund the program required to accumulate grain in sufficient quantity so as to deliver the people in the seven lean years.

It would be incorrect to describe this entrepreneurial program as "buy low and sell high." It would be accurate to describe it as selling high, but it was not a voluntary transaction. It was not a matter of buying. It was a matter of confiscating. It was a matter of "confiscate low and sell high." This is not how we normally understand entrepreneurship. Joseph confiscated the grain when it was low in price because he confiscated it during years of remarkably high output. He had those grain reserves ready to sell back to the people when the seven lean years arrived.

So, he had an investment program: the accumulation of grain reserves. The people of Egypt had to reduce their consumption below what it would otherwise have been during the seven fat years. Joseph did not waste this grain. He had an entrepreneurial vision that put this grain to productive future use, both from the point of view of the people and from the point of view of the Pharaoh. In order for this program to work, it had to be based on accurate forecast. It also had to be based on a plan of action that was consistent with this forecast. Finally, it had to be based on reduced consumption on the part of the people who provided the raw material required to implement the investment program. If any of these three features had been missing, the people of Egypt would have starved.

A. Saving

Fundamental to economic growth is a program of thrift. People must be willing to sacrifice present consumption for the sake of future consumption. They must be sufficiently future-oriented to motivate them to set aside resources today in order to gain a stream of income at some point in the future.

This process is easiest to understand when we discuss agriculture. There is a concept called "seed corn." This is the corn that we must set aside in one harvest in order to provide seed corn for the next harvest. We must not consume our seed corn. That would be self-destructive. We would live more comfortably today, but only at the sacrifice of starvation in the following year. Mankind has always understood this agricultural relationship between saving in the present and consuming in the future. This is the mental model that mankind has used as a way to understand all productivity. The practice of setting aside seed corn applies to every occupation and every realm of production.

If we wish to increase our agricultural output in the following year, we must set aside a larger reserve of seed corn than we set aside in the past. Also, because there are other factors of production that we will need in order to remain productive, we must set aside these production factors, or else we must set aside money sufficient to purchase these complementary factors of production in the next planting season. In other words, we have to reduce our consumption this year beyond the mere accumulation of seed corn sufficient to equal this year's output. This is a program of thrift.

This program would have been required in the garden of Eden. *It is an aspect of finitude*. While scarcity is a greater burden as a result of the curse of mankind and the ground in Genesis 3:17–19, saving would have been required in the world before the fall of man.[North, *Genesis*, ch. 12] It will also be required in the new heavens and new earth after the final judgment.

A fundamental principle of economics is this: *we cannot get something for nothing*. This is an aspect of finitude. We must pay the price of future consumption by means of reduced consumption in the present. We must always have the conditions of the future in our minds when we make plans in the present. We can be wrong about these conditions in the future, but we must have some sort of plan if we are not to find ourselves in a crisis condition in the future.

It is an aspect of growing maturity that we count the costs of our actions. Fundamental to the description of counting the costs that Jesus presented in Luke 14:28–32 is a concept of the future. [North, *Luke*, ch. 35:C] People count the costs in the present in terms of their assessment of the costs and benefits of a future condition. If they conclude that the costs outweigh the benefits in the future, they have to readjust their plan of action in the present.

When people have little wealth, it is difficult for them to save. The marginal utility of the money saved is high for a person who has very little money. In contrast, someone with a great deal of money finds it relatively easy to save. The marginal utility of the money set aside for savings is considerably less to the rich man than to the poor man. I say this as a Christian economist. I do not say this as a humanistic economist. If a humanistic economist follows strict methodological individualism, he is not entitled to make this judgment on a scientific basis. According to methodological individualism (nominalism), it is not possible scientifically to make interpersonal comparisons of subjective utility. Nevertheless, we know that rich people find it easier to save a high percentage of their income, while poor people find it extremely difficult to save the same percentage of their incomes. They do not have sufficient financial reserves beyond the seed corn required for the next year.

Ever since 1800, the West has found it increasingly easy to save a high percentage of its income. The constant increase in per capita wealth has made the modern world rich beyond anyone's dreams of 1800. The superrich provide a high percentage of the savings in every nation. This is because they have so much wealth that they cannot possibly consume all of it in the time they have available to live their lives. Most of them are active investors. They are entrepreneurs. They spend a large percentage of their days finding ways to make even more money. But to make more money, they must spend more money. To fund entrepreneurial ventures, they must have capital to allocate. There is a famous saying: "The rich get richer, and the poor get poorer." This is incorrect in a free market society. The rich do get far richer, but the poor get steadily less poor. They move into the lower middle class. Then their children move into the middle class. The constant increase in per capita wealth is made possible by per capita capital investing, which is provided mainly by rich individuals and by successful corporations.

Faithful covenant-keepers must also have a plan of action. This plan must be funded. It must be funded by wealth that would otherwise have

been consumed. We are no different from the people of Egypt in the days of Joseph in the seven fat years. For a savings program to be effective, there must be entrepreneurial ventures that prove to be profitable. If the sacrifice involved in saving were applied only to visions of the future that proved to be inaccurate, then the savings program would do individuals no good and their societies no good. It would be as if Joseph's use of the confiscated grain was to sell that grain and use the money to build chariots. Egypt would have starved. The chariots would have been useless, for they were offensive weapons, and the nations around Egypt were also starving. What made the program successful was this: Joseph had an entrepreneurial vision of the future that was accurate, and he had a plan to implement a program to deal with that future. Then he confiscated the savings required to fund the plan.

B. Pricing the Factors of Production

The savings program sets aside wealth. This wealth is used to purchase factors of production. People do not normally bury money in the ground. They may bury it in the ground if they expect military invasion. Or, if they are burying gold and silver coins, and the government inflates the currency, then the investment of money in the ground may prove to be profitable. But buried money is strictly defensive. It is a strategy applicable whenever the free market is being undermined by the state.

The money that people save is put to immediate productive use. It may be used to buy raw materials, lease capital equipment, purchase land, build a factory, or whatever else is necessary to complete the entrepreneurial program of the investors. The money is spent. People receive that money in payment for whatever it is they are selling to the investors. It may be land or raw materials. It may be labor time. But it is not wasted. It is reallocated in such a way as to increase output in the future. Put differently, the money is allocated to meet future consumption rather than immediate consumption. A different group of people will receive the money today. The people receiving the money today will be producers of capital goods, raw materials, and other factors of production. The money will be used to put food on the table of lots of workers.

As money is reallocated toward the capital goods industries, the prices of these goods and services will tend to rise. The market will respond to increased demand for these goods. As prices rise in these areas of the economy, other entrepreneurs will see an opportunity. They will begin to shift

production in the direction of goods and services that are associated with production. So, there will initially be an increase in the prices of these goods, but, over time, increased productivity of these goods will tend to push the prices of these goods back down. This is the competitive process at work. This is how the auction process of the market functions. The rising prices of production goods and services send signals to entrepreneurs that there is now rising demand in this area of the economy. In order to take advantage of these new opportunities, producers will begin to shift production in the direction of production goods and services.

Because of this shift from the purchase of consumption goods to the purchase of production goods, people who produce consumption goods will find decreasing demand for their services. In any case, demand will not rise as much as it would otherwise have risen, had entrepreneurs not persuaded savers to transfer money to them for the sake of increases in future output. This is the auction process at work. If people have decided to save more in the present rather than consume more in the present, then their allocation of resources will reflect this desire. So, people involved in the sale of immediate consumption goods will find the markets more competitive. There will be fewer buyers of their output. But this will be true only for the period of production. When some of the entrepreneurial schemes prove to be productive, which they will, then those people who had saved money in the previous period may decide to spend this money, or a portion of this money, on consumption goods and services. The rising productivity of the overall economy, which is the product of the combination of accurate entrepreneurial forecasts, accurate plans of production, and saving, will then lead to greater output and therefore greater income for the participants in the successful ventures. At that point, people involved in the consumption side of the economy will find that their prospects have improved.

All of this has to do with time perspective. If people become more future-oriented, this is going to affect their allocation of resources. If they decide that they would rather have greater income in the future, they will have to set aside resources in the present. But it is not sufficient to reduce present consumption. They must also allocate these resources in ways that prove to be productive in the future. Again, the example of Joseph is a good one. He used the forced savings of the people to fund an investment program that was economically efficient, and which was also based on an accurate forecast of the future. He did not waste resources.

It is not true that saving money, in and of itself, is sufficient to increase a person's future wealth. *Saving is necessary, but it is not sufficient.* There must also be an accurate assessment of the economic future. There must also be a plan of action that does not waste resources, and which does provide salable output in the future. There must be consumers in the future who are willing to purchase the output of the various entrepreneurial plans of action. They must be willing and able to purchase this output at prices consistent with the original entrepreneurial plans. In short, *there is nothing automatic about this process.* It is driven by entrepreneurship.

C. The Structure of Production

The structure of production in a society reflects the combination of entrepreneurial vision, entrepreneurial plans, and the savings rate.

By the phrase "structure of production," I mean the complex and ever-shifting combination of raw materials, capital, and labor. *Capital is a combination of raw materials and labor over time.* This structure of production is constantly changing because individual plans of action are constantly changing. People bid in an open marketplace for the goods and services they want to buy, and their bidding produces objective prices. These prices provide signals to entrepreneurs regarding what people are willing to pay. These signals provide a portion of the knowledge necessary for the accurate combination of savings, entrepreneurial vision, and entrepreneurial plans of action. Because people's tastes change, and their assessments regarding the future change, they are constantly bidding in new ways to achieve their goals. As they change their minds, prices change in the competitive marketplace, and these changed prices send new information to producers of future goods and services.

If an entrepreneur believes that a new approach to production will increase his profits in the future, he has to restructure his plans of action. He then has to restructure his budget. He must stop spending in some areas so that he can start spending in new areas. He will have to go into the marketplace and bid for the factors of production. If he is successful in this bidding, he will redirect factors of production away from his competitors. His competitors will find that their plans have been disrupted. They will have to devise new plans.

The most versatile factor of production is human labor. A highly complex machine that is designed to produce a specific part in a complex system of production is vulnerable to falling demand for the output of this struc-

ture production. There is not much that an owner of such a machine can do to make that machine productive after demand has fallen for the final output of whatever this machine does in the structure of production. The machine may now be useful only as scrap metal: unspecialized and therefore cheap. The owner of the machine will suffer substantial capital losses as a result of the shift in consumer demand. But a laborer who is competent in one field probably is competent in another field. He will not be equally competent. He may have to suffer a reduction of his salary in order to find employment in the new circumstances. But he will not suffer a loss of value proportionate to the loss of value of a highly specialized machine.

People can learn to do new jobs. This may take time for them to gain the experience. But they are capable of learning. They are capable of responding to the new conditions of supply and demand. They will have to seek employment in fields in which, other things being constant, they would prefer not to. But conditions have changed, so their plans must change. They will be changed.

Because entrepreneurial insights are usually focused on narrow segments of a particular market, the entrepreneur who has seen an opportunity will shift his expenditures to even more specialized programs for increasing output. The constant increase in the division of labor, which is the result of a constant increase in per capita investment, produces increased specialization of production. This is why entrepreneurship tends to be focused on relatively narrow fields of production. *Specialized knowledge is the primary means of profitability for entrepreneurs.* They gain their leverage from their competitive edge in a narrow field.

When they begin to spend money in this field in response to their flash of insight regarding future consumer demand that is not perceived by their competitors, they focus on a more specialized niche. *The more specialized the niche, the more vulnerable the entrepreneur is to a change in consumer demand.* But, on the other hand, the greater is the profitability if his insight turns out to be accurate. There will be more consumers bidding against each other for the output of his venture.

In extremely rare cases, an entrepreneur who sees an opportunity in a narrow field is able to use success in this field to branch out in other fields. The most famous example of this in modern times is Amazon. It began in the mid-1990s as a company that made it easy for consumers to buy low-priced used books. Within a decade, it had expanded to other consumer

goods. Within two decades, it had become the largest online retail outlet in the world. Founder Jeff Bezos in early 2020 was the richest man in the world. He had used his knowledge and his software in the field of used books to expand on a scale never before seen. In the late nineteenth century, Sears and Roebuck achieved something similar. Richard Sears began by selling cheap watches by mail in 1879. Within three decades, Sears and Roebuck was the largest retail outlet in the world. But these stories are rare.

When an entrepreneur begins to fund his venture, it is vulnerable to swings in consumer demand. If demand is not there as expected, he will find it difficult to sell the productive capital that he has assembled. These tools are too specialized. There is no market for them at the price he paid. On the other hand, if demand is considerably greater than he expected, he will have to invest more money in order to expand production. This in turn makes the company even more vulnerable to swings in consumer demand. There is this *constant increase in specialization* in niche markets. This *increases the vulnerability* of any particular company. But, in the aggregate, this process decreases the vulnerability of society in general. There are more and more competing producers for consumers' money, which gives consumers a much stronger position in the marketplace. They have a much wider range of choices because of the increasing specialization that is taking place in each of the markets. There is greater predictability for the consumers. This predictability is funded by the increasing unpredictability in the lives of entrepreneurs.

Conclusion

The example of Joseph in Egypt is the best example in ancient literature of the relationship between savings and entrepreneurship. Joseph had an accurate understanding of what would come to Egypt in the next 14 years. He was given control over a program of thrift for the whole nation. He devised a program that integrated the 20% taxation program, a system for storing the grain, and a system for selling the grain back to the Egyptians, beginning in the first year of the famine. It was a highly successful venture from the point of view of Joseph, the Pharaoh, and Joseph's family. It was also highly successful from the point of view of the people of Egypt, who otherwise would have starved.

In a free market, God does not give unchallengeable interpretations of dreams to senior government officials. He gives speculative insights to en-

trepreneurs regarding the future, but not everyone has a plan to implement in order to profit from these speculative insights. Nevertheless, in a society in which there is widespread future-orientation, there is far less threat of economic disruption than in societies in which there is much greater present-orientation. The greater supply of wealth that is allocated toward future production funds many different programs of entrepreneurship. Most of these entrepreneurial ventures will not produce profits, but a sufficient number of them will produce profits so as to increase the net output of the society and therefore the net wealth of the society. This is the origin of the wealth of nations. Adam Smith understood the process far better than most of his predecessors.

Thrift does not automatically produce future wealth. To use a familiar example in the history of agriculture, someone may set aside seed corn for the next year, but the weather may be bad, the crop may fail, and the person may lose his farm, especially if he is in debt. This has been the history of agricultural production from the late eighteenth century until the present. The percentage of the population involved in farming has fallen from something in the range of 90% in the United States in 1800 to something in the range of 2%. But output has increased enormously. The cost of home-cooked food in American households is now less than 10% of most families' budgets. In 1900, it was about 40%. In 1950, it was about 30%. This has been an answer to this prayer: "Give us today our daily bread" (Matthew 6:11). [North, *Matthew*, ch. 12:B] Without the enormous increase in capital investment in the agricultural industry, this prayer would not have been answered. Yet, on an individual basis, decade by decade, most American farmers saw their plans fail. They had to go into other lines of work. If they did not, then their children did. So, thrift is not sufficient to produce individual success in the future. But it is necessary to produce corporate success in the future.

Think of the process in terms of this slogan: "A forecast without a plan is impotent. A plan without savings is impotent. Output that is not validated by consumer purchases is wasteful." Most forecasts are wrong. Most plans are inefficient. Most plans are never funded. Most new entrepreneurial ventures fail. Yet, in the aggregate, the combination of these three factors—forecast, plan, and savings—has led to the transformation of the world. Men around the world are richer today than would have been conceivable in 1800.

34

CREDIT AND DEBT

The Lord will open to you his storehouse of the heavens to give the rain for your land at the right time, and to bless all the work of your hand; you will lend to many nations, but you will not borrow. The Lord will make you the head, and not the tail; you will be only above, and you will never be beneath, if you listen to the commandments of Yahweh your God that I am commanding you today, so as to observe and to do them, and if you do not turn away from any of the words that I am commanding you today, to the right hand or to the left, so as to go after other gods to serve them (Deuteronomy 28:12–14).

The foreigner who is among you will rise up above you higher and higher; you yourself will come down lower and lower. He will lend to you, but you will not lend to him; he will be the head, and you will be the tail. All these curses will come on you and will pursue and overtake you until you are destroyed. This will happen because you did not listen to the voice of the Lord our God, so as to keep his commandments and his regulations that he commanded you (Deuteronomy 28:43–45).

Analysis

I discussed these passages in detail in Chapter 70 of my commentary on Deuteronomy: "Credit as a Tool of Dominion." The theocentric issue here is God as the source of both positive and negative economic sanctions. These sanctions lead either to the corporate inheritance or disinheritance of nations. The nations will become Israel's inheritance if Israel obeys God. Israel will become the owner of the other nations' capital. This will in turn elevate Israel's political power over them. In short, "Rich people rule over poor people, and one who borrows is a slave to the one who lends" (Proverbs 22:7).

These parallel passages reveal the fundamental nature of consumer debt. Consumer credit and consumer debt are not neutral ethical issues. They are covenantal issues. They reveal the outworkings of two rival ways of life: covenant-keeping and covenant-breaking. Moses' listeners fully understood the difference between a creditor and a debtor. It was a blessing to be a creditor; it was a curse to be a debtor.

If we were to look at specific debt arrangements today, they would appear to be voluntary. Someone wishes to increase his consumption of goods and services, and he can do so by taking on a debt. Someone else wishes to increase his net worth by sacrificing consumption in the present for greater income in the future. He lends money to the person who wishes to increase consumption. But in the era of the Old Testament, and in fact prior to about 1920 in the United States, consumer debt was primarily generated by a crisis in some families' lives. Consumer credit was the result of major setbacks in the lives of certain individuals.

Collateralized credit for business purposes existed in the Old Testament era. Such arrangements can be found in the records of ancient civilizations. There was a developed credit market in Babylon and even earlier civilizations. Entrepreneurs made decisions about the likelihood of profitable ventures. They would sometimes borrow in order to fund these ventures. Without the funding, the businessman would be unable to launch the ventures. But these were highly risky debts. A person's failure to meet his debt obligations could lead to severe negative sanctions. The person could lose whatever he had used as collateral for his debt. He might even be sold into servitude.

So, there is always an element of subordination in any debt relationship. The borrower really is servant to the lender. As long as he can make his payments, he maintains his independence, but this independence is based on an economic contract. If he fails to meet the terms of this contract, he can lose his independence.

The two passages clearly reveal that the ability to extend debt is based on greater wealth. The individual who is in a position to lend money is already economically successful. He has already received the blessings of God. The first 14 verses of Deuteronomy 28 deal with God's visible blessings in the lives of covenant-keepers. These blessings involve economic blessings, but they are not limited to economic blessings. They are part of a general pattern of causation in history. Moses had already revealed that *the bless-*

ings of God in history are there to ratify God's covenant with the people of Israel. "He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today. It will happen that, if you will forget the Lord your God and walk after other gods, worship them, and reverence them, I testify against you today that you will surely perish" (Deuteronomy 8:16–19). [North, *Deuteronomy*, chaps. 22, 23]

The earlier passage in Deuteronomy 28 is a call to money lending. In other passages in the Mosaic law, covenant-keepers are forbidden to extract interest payments from other covenant-keepers who have fallen into hard times. This was an aspect of charitable giving. The lender forfeited the rate of legitimate return that he could have received if he had lent money to covenant-keepers who were involved in business ventures, or to covenant-breakers who had fallen into hard times. Instead, he lent to covenant-keepers in distress.

Lending was a means of extending dominion over the lives of covenant-beakers. Put differently, lending was a program of dominion. It was the dominion of covenant-keepers at the expense of covenant-breakers.

One Mosaic law authorized money lending at interest to aliens in the land who were not regular participants in the worship of God. The Hebrew word for these people was *nokree*. They were spiritual outsiders living inside the boundaries of the nation of Israel. "To a foreigner you may lend on interest; but to your fellow Israelite you must not lend on interest, so that the Lord your God may bless you in all that you put your hand to, in the land which you are going in to possess" (Deuteronomy 23:20). [North, *Deuteronomy*, ch. 57] But there was another kind of foreigner, a resident alien who did worship God, but who was not a member of the congregation yet. There was a prohibition on lending at interest to him. "If your fellow countryman becomes poor, so that he can no longer provide for himself, then you must help him as you would help a foreigner or anyone else living as an outsider among you. Do not charge him interest or try to profit from him in any way, but honor your God so that your brother may keep living with you. You must not give him a loan of money and charge interest, nor sell him your food to earn a profit" (Leviticus 25:35–37). The sojourner (*to-shawb*) was to

be treated as a brother: kindly. He was to be granted charity when needed. [North, *Leviticus*, ch. 28]

In the New Testament, Jesus extended this principle. "If you only lend to people from whom you expect to be repaid, what credit is that to you? Even sinners lend to sinners, to get back the same amount. But love your enemies and do good to them. Lend, expecting nothing in return, and your reward will be great, and you will be sons of the Most High, for he himself is kind toward unthankful and evil people. Be merciful, just as your Father is merciful" (Luke 6:34–36). [North, *Luke*, ch. 10] In the New Testament, lending to people in distress is a form of mercy. It is a form of evangelism. It is a way to testify to God's mercy. This is an extension of the famous passage in the Lord's prayer: "Forgive us our debts, as we also have forgiven our debtors" (Matthew 6:12). [North, *Matthew*, ch. 12:C] The extension of credit to people in distress is therefore not to be evaluated in terms of profit and loss. It is also to be seen as a means of evangelism. It has to do with a personal universe governed by a God who has shown mercy to covenant-keepers.

The general outlook of the Bible regarding debt has not changed. Debt is still seen as a liability. It is still seen in terms of a hierarchical system of economic authority. The borrower is servant to the lender. The apostle Paul wrote this: "Owe no one anything, except to love one another. For he who loves his neighbor has fulfilled the law" (Romans 13:8). [North, *Romans*, ch. 12] It is a good thing to be a lender. It is a good thing to be the recipient of sufficient wealth in history to enable you to lend. But lending should be governed by the principles of evangelism, not simply by the principle of increased wealth. God is entitled to a positive rate of return. He expects this. This is what the parable of the talents is about. But this process of extending the kingdom of God is twofold. There is a profitable element in becoming a money lender, but there is also a charitable element. A person who is in a position to lend money should be aware of both aspects of credit and debt.

A. Time Orientation

As I have already discussed in Chapter 30, lending is an aspect of time orientation. Some individuals are highly future-oriented. They discount the value of future wealth at a much lower rate of interest than a person who is present-oriented. They are willing to forfeit present consumption for the sake of greater future consumption. They are willing to lend at a low rate of interest. They transfer the control of money over to a borrower, but only on

this condition: the borrower agrees to pay back the loan, plus a positive rate of return, which we call the interest rate. The fact that some people are present-oriented, and are therefore willing to become debtors, is indicative that there are fundamental differences between people with respect to time preference. I have cited the work of Harvard political scientist Edward Banfield, who in the late 1960s described present-oriented people as lower-class individuals. I think this is a correct assessment. There is an ethical component to both credit and debt. It is far better to be future-oriented than present-oriented. Being future-oriented is a blessing of God. Being present-oriented is a curse of God.

These rival views of time manifest themselves in children as early as age four. There was a famous psychological experiment conducted by a psychologist at Stanford University, Walter Mischel. It was conducted in the 1960s and 1970s. It involved dozens of young children. A young child would be left in a room with a marshmallow. The psychologist would tell the child that the child would receive a second marshmallow if he did not eat the marshmallow in front of him. Then the psychologist would depart for 15 minutes. This rate of return was of course astronomical: 100% in 15 minutes. There was a moving picture made of each child. Some of them squirmed. Some of them ate the marshmallow. Some of them avoided eating the marshmallow, generally by not looking at it. There were follow-up studies of the performance of these students in high school and early adulthood. The students who had resisted eating the marshmallow generally had superior academic performance as teenagers and young adults.

From a biblical standpoint, individuals should be trained from a young age in the benefits of future-orientation. This is part of training for dominion. Christians should be taught to trust God's providence in their lives. They can therefore rely on God to provide sufficient income to maintain their families, their businesses, and their specialized callings in life. They believe in ethical cause-and-effect in history. They learn not to trust their money, their brains, their entrepreneurship, and other earthly advantages. These advantages are not the result of impersonal luck, impersonal fate, or random events in history. They are part of a providential decree of God to extend the kingdom of God in history.

There is nothing immoral with lending at a rate of interest to the equivalent of the *nokree*: the covenant-breaker who has little self-discipline, and who is not interested in conforming himself to the ethics of God. He should

be put in a subordinate position to the covenant-keeper. He should be reminded that he is subordinate to God, and one manifestation of this subordination is his position of indebtedness. Similarly, Christians should be taught from an early age not to become debtors in such arrangements for exactly the same reasons. They should not be subordinate to covenant-breakers.

When an asset is a productive asset, the borrower has to make an assessment of his degree of liability and risk in the that relationship. The purchase of a house by means of a mortgage is a common way for young people to establish ownership of an appreciating asset. If the contract does not allow the creditor to receive anything in return from a default except the collateral, namely the house, then such a debt may be legitimate. But if the debt contract enables the creditor to attach a lien against the wages of an individual, then it is better to rent and thereby avoid debt. *The key issue is the collateral*. If the loan's collateral is a person's future income, then the debt does place him in a position of servitude. It should be avoided.

B. Debt, Credit, and Exchange

When a person sells an item to another person, there is either an immediate exchange of present assets or the establishment of a credit/debt relationship. In the first case, one participant receives goods, services, or money from the other. The other party to the transaction receives the reciprocal: money. In the second case, one participant receives present assets in exchange for a promise to pay future assets: money. *Credit and debt are simultaneous and reciprocal*. One person surrenders ownership of goods, or legal claims on future goods, or else he supplies present services. For this, he receives the other person's promise to pay future goods or services, or ownership of a third party's promise to provide goods or services in the future. There is present value received on both sides of the transaction. Promises to pay often possess present value. The more trustworthy the promise-maker is, the greater is the economic value of his promise, i.e., the lower the risk of default. Because promises to pay possess present value, there is value for value exchanged. Neither party in the exchange is asked to surrender something for nothing. Neither party is expected to gain something for nothing. Each party exchanges in order to receive something of greater value to him than what he surrenders. But there is not an exchange of presently consumable wealth. One (or more) party in the transaction promises to pay future consumable wealth. In most exchanges in a modern

economy, there is an element of delayed payment. Most exchanges have an element of debt and therefore credit. Most exchanges are by check or digital transaction. Only a comparative handful of exchanges involve currency, which means current payment. Very few exchanges are pure barter.

Barter is characteristic of a low division of labor society, i.e., a backward society. Therefore, *the greater the division of labor, the greater the level of debt/credit*. The greater the division of labor, the greater the specialization of both production and consumption, i.e., the greater the number of choices. *The greater the number of choices, the greater the wealth of the society*. If credit produces wealth through thrift, then so does debt. Credit and debt are two sides of the same legal relationship. We can accurately say, then, that *debt produces wealth*. There is no way around this fact until such time as all electronic payments are cleared instantaneously.

The high per capita output of modern society rests on an extensive division of labor and therefore extensive credit/debt. Without credit/debt, most of the world's population would die within a few weeks. There is a tendency for traditional critics of modern life to disparage debt. Christians may quote Paul (Romans 13:8). But the debt discussed by Paul, which Paul rejected, was not the debt of 30-day deferred payments (credit cards) or the period needed for checks to clear the banks. The debt in question was long-term debt. As to how long a debt period must be before critics begin to challenge its legitimacy, there is no way to say in advance.

Debt establishes a legal bond between creditor and debtor. A person who writes a check or uses a digital credit instrument to buy something has established a legal relationship with the seller. This relationship lasts until the check clears and the seller's bank account is credited with the money. Then the legal relationship ends, unless there was some sort of guarantee with respect to the good or service.

A guarantee is another form of debt. When an automobile manufacturer sells a vehicle with a six-year or 100,000-mile (or kilometer) guarantee, the manufacturer becomes a debtor to the buyer. This is not usually called a debt, but the sales contract establishes a debt. There are people who claim to be opponents of debt who would accept the legitimacy of a performance guarantee of some kind. This indicates that they have not thought through the meaning of debt.

We do not think of an automobile manufacturer as being subservient to the buyers, but it is. It has issued legal guarantees. From time to time, we

read of vehicle recalls by a manufacturer. The firm offers to make a free repair of a faulty part. It costs millions of dollars just to inform the buyers of the recall, let alone make the repairs. The buyers may be subservient to the automobile manufacturer. Buyers usually buy on credit. The credit may be issued by a bank, but it also may be issued by the manufacturer, who has set up a division for making loans. The extension of debt by the seller of goods is part of the overall sales campaign. There may be more profit in the debt contract than in the sale of the product. A manufacturer may be using the product as a means of persuading buyers to accept debts. So, for buyers and sellers, mutual promises over time may extend for years. Each party is subservient to the other in some way. Each has extended credit and accepted debt in order to facilitate the original transaction.

Then why does the text say that the nation that has extended credit is the master, and the nation that has accepted a debt is the servant? What have nations got to do with anything, analytically speaking? The transactions are all individual. In what way are national entities involved? I discuss these issues in the next section.

C. Debt and Subordination

God says clearly in these passages that the extension of credit is a means of dominion. There are winners and losers. These individual winners and losers belong to specific covenantal associations, called nations. Gains and losses, when added up, establish criteria for winning nations and losing nations, or rival groups within a nation. There can be no question of God's assessment of credit and debt. First, it is better to lend than to borrow (Proverbs 22:7). [North, *Proverbs*, ch. 67] Second, this is as true of nations as of individuals. Third, the extension of credit is a tool of dominion. If you wish to rule, become rich. If you wish to rule, extend credit. What is not said here, but is surely implied, is that one means of becoming rich is to extend credit. The creditor gains present legal title to future goods by surrendering present title to present goods. He values the future goods promised by the debtor more than he values the present goods that he surrenders to the debtor in order to establish the creditor/debtor relationship. He presumably is more future-oriented than the debtor. He is therefore in a higher class.

High present-orientation is not true of a debtor who is using the debt to build a business or gain an education or in some other way become more productive. He has adopted an economic position described by the Bible as

subservient, but he does this temporarily for a purpose: to become a ruler later. This pathway from servant to ruler is basic to the entire Bible story, from Adam, who was required to obey God in the garden before becoming a ruler over the earth, to Joseph, who served Potiphar and the prison master, to Moses, who was God's servant, to Christ, as the archetype of servant become master (Philippians 2:5–11). [North, *Epistles*, ch. 20] *This is why debt for productive purposes is legitimate for a dominion-oriented covenant-keeper.* Nevertheless, the debt-burdened covenant-keeper should acknowledge the reality of his subordinate condition during the period of the debt. He is paying for his future authority to rule by spending a period in bondage. This is not a cost-free arrangement. Israel was a servant of Egypt, but at the exodus, Israel collected what was owed (Exodus 12:35–36). There are periods of subordination for a nation, and then there may be periods of dominance. During the nineteenth century, England was the world's money-lender and investor. The United States was a debtor nation to England. But the debt was productive debt. It was used to build canals, railroads, and other capital projects. After World War I bankrupted nations in Europe, the United States became a creditor nation. The same legal relationship—creditor/debtor—changes character when the debt is used for consumption.

When an individual borrows money to purchase goods that depreciate, he consumes his capital. What capital? First, it is his ability to borrow, which is a capital asset. He uses it for present consumption rather than future production. Second, he consumes his future income, which is now owed to the creditor. This income could have been used to lend out or create a business, but it belongs to the creditor until the debt is repaid.

Long-term capital consumption is the road to poverty and servitude. This process reduces a person's future options, i.e., his choices. This is the meaning of poverty: few choices. Capital consumption reduces a person's ability to become more productive. If done in old age, it reduces one's economic legacy.

We must consume in order to live. Some luxury spending is part of God's rewards in history: post-production, not pre-production. Charity is also positive. But only in emergency conditions should a person use borrowed money to buy consumer goods, which are usually consumed rapidly. Charity creates long-term dependence on the donor by the recipient, unless it is designed to avoid this effect. Charity that establishes dependence is like credit that establishes dependence. It is a tool of dominion. Charity that is

financed with borrowed money creates a *hierarchy of dependence*: from the creditor to the borrower to the recipient. A nation whose members are expanding their credit through their thrift is extending its dominion. Properly put, a nation whose residents have extended credit, net, to residents of other nations have extended the dominion of their nation or society. As individuals acting in their own self-interest, they have extended their nation's corporate dominion. This market-produced fusion of personal dominion and corporate dominion was not widely understood prior to the publication of Adam Smith's *Wealth of Nations*. Conversely, Deuteronomy 28:43–44 indicates that a nation that is a net borrower may be under a long-term curse, or it may be involved in a capital-formation program. It depends on what the debt is being used for: consumption or capitalization. [North, *Deuteronomy*, ch. 70:B] This assessment of a corporate condition implies that the reason for individual indebtedness is influenced by a shared corporate worldview and a shared corporate rate of time orientation. Individuals within a group view dominion in much the same way: it is either worth sacrificing present consumption in order to attain it, or else it is not worth it. This means that corporate groups are more than the individuals who compose them. It also means that exclusive methodological individualism is not biblical. Three of the four specific covenants of God are corporate: familial, ecclesiastical, and civil. Confessions can also be national (Exodus 19:7–8). Covenant sanctions are corporate.

D. Clustering and Commerce

If the means of establishing a credit/debt relationship between individuals is trade, then so is the means of establishing a credit/debt relationship among groups, including nations. Trade across borders is conducted between individuals: across national borders, across state borders, across city borders, and across the street. Despite the fact that trade is between individuals, trade has corporate effects within borders. A familiar proverb says, "Birds of a feather flock together." So do people. People with a shared worldview tend to adopt similar spending and saving habits. These habits create corporate patterns of thrift.

In the late twentieth century, market researchers discovered the existence of a series of comprehensive, statistically significant correlations among people who live in the same zip code, i.e., a postal delivery neighborhood. These correlations are lifestyle correlations. Over 60 separate postal

code lifestyle classifications were known to exist in the United States in the 1990s. These correlations are geographical. Marketers make accurate decisions in terms of these geographical correlations. This phenomenon has been called *clustering*. To limit a discussion of trade to pairs of individuals would lead the analyst to overlook clustering. This clustering can be intensely local. It can also be international. Most of the time, the extent of clustering is not perceived by residents. While most people can recognize differences of neighborhood income and such neighborhood phenomena as mowed lawns, painted homes, and other aesthetic identification markers, the techniques of scientific surveying reveal subtle differences that residents do not consciously recognize, such as favored brands of products or favored forms of recreation. Because such detailed and objective local distinctions can be identified scientifically and verified by the results of test marketing by profit-seeking companies, local characteristics can accurately be said to exist. There are also well-known characteristics of nations that residents inside and outside readily acknowledge. The old joke about purgatory being a world in which Germans are the comedians, the French run the bureaucracies, Italians own the banks, India runs the transportation system, and the English are the chefs, is amusing because national characteristics are widely recognized. Racial and national characteristics provide the most familiar distinguishing marks of "them vs. us." People identify themselves as members of a group that provides them with meaning, security, and a sense of belonging to an inter-generational group that offers personal significance. Less meaningful in industrial societies are tribal distinctions that once were matters of life and death. Clan membership used to be significant for survival in Scotland, but no longer. And, because of the effects of humanism, theological confession has been relegated to official insignificance in the civil realm. Yet humanism proclaims an intensely theological confession regarding the nature of God, man, law, causation, and time.

Trade between individuals can and does result in corporate assessments regarding corporate winning and losing, kingdom-building and kingdom-surrendering. The assessments in Deuteronomy 28 regarding the comparative success of Israel among the nations points to the possibility of corporate progress over time. Trade by individuals is rarely discussed in the Mosaic law, other than in the context of oppression or sabbath-breaking. The personal benefits of trade are rarely mentioned. Yet the national effects of debt are discussed here in terms of covenant-keeping and covenant-break-

ing. The Bible's main passages that discuss economic results—Leviticus 26 and Deuteronomy 28—begin with a nation, not individuals. The text makes it clear that it is better to extend credit than to amass debt. Yet to extend credit is to indebt the recipient. The context of these passages is the exercise of lawful rule. The passage discusses international politics, not wealth-creation. It discusses the results of a series of voluntary exchanges between sellers and buyers. The corporate results are national debt, meaning national subordination, and national credit, meaning national domination. Out of millions of politically unplanned, mutually agreed-upon voluntary exchanges comes national servitude or dominion. Out of many, two.

How can this be? How can a series of unplanned individual exchanges produce long-term corporate results that are described here as covenantal curses and blessings? Because of causation in history. *Social causation is covenantal*. It has to do with confession and lifestyle, with word and deed. The confession and lifestyle that God mandates in Deuteronomy rests on His national covenant. Those who had covenanted with God—Israelites—were distinguished from resident aliens and residents in other lands. The individual covenant is structured so as to produce dominion for God's corporate kingdom. So are the familial and ecclesiastical covenants. They are of one piece. They are a "package deal." All work together to extend God's kingdom in history. (I deliberately use the present tense.) If a society abandons one of the pieces, it has compromised its status as covenantal under God. *God's covenants capitalize the kingdom of God*. They create a lifestyle that is favorable to economic growth. This means that the laws of the covenants promote personal thrift, hard work, careful planning, honest money, private property, and entrepreneurship. Yet the actual words of the four specific covenants do not require the oath-taker to pursue allegiance to most of these economic means to the larger end, namely, the extension of God's kingdom in history. The eighth commandment (Exodus 20:15) does require the oath-taker to forego theft. [North, *Exodus*, ch. 28] This is an affirmation of private property. The tenth commandment (Exodus 20:17) against covetousness reinforces this affirmation. [North, *Exodus*, ch. 30]

The New Testament's clearest statement with respect to lending is found in Jesus' parable of the talents (Matthew 25:14–30). [North, *Matthew*, ch. 47] The parable is about the stewardship of a man's God-given resources in history. The man who buried his talents, returning nothing extra, had misunderstood the biblical principle of value-added investing. He was criti-

cized harshly by the owner, who told him that he should have lent the money at interest. This passage legitimizes banking and interest. The money returned to the owner should have been more than the money delivered because interest was available to the risk-aversive steward. By forfeiting any interest return, the steward cheated the owner of a legitimate return on the use of his money.

E. Leverage and Liability

The great advantage of debt is that it provides leverage. Let me illustrate the power of leverage.

1. Leverage Is Two-Way

An investor borrows 90 ounces of gold to make an investment. He may be an entrepreneur who has a business. He may be a speculator. He uses ten ounces of gold of his own money, and he borrows the 90 ounces. He makes an investment that is worth 100 ounces of gold. Let us say that the value of that investment doubles over the next year. He now has 200 ounces of gold. If he borrowed the 90 ounces at 5% interest, he repays the lender 94.5 ounces. This leaves 104.5 ounces of gold in the account. On the basis of his investment of his own ten ounces of gold, he has made 94.5 ounces of gold. That is almost 9 ½ times his initial investment. If a person invests wisely with borrowed money, his rate of return on his investments will be very high. Had he invested ten ounces of gold with no leverage, he would have 20 ounces of gold at the end of the year. That is a profit of 100%, but that is nothing compared with 9 ½ to one.

The problem with leverage is that it is a two-way street. If the person borrows 90 ounces of gold, and the investment falls to half of the initial investment of 100 ounces of gold, he will owe the investors 94.5 ounces of gold at the end of the year. The investment will be worth only 50 ounces of gold. How will he repay the creditors? He has a liability of 104.5 ounces. He has lost his initial investment of ten ounces. Where will he get the extra money to repay the lenders?

The threat of loss reduces people's degree of leverage. They do not borrow 90 ounces of gold in order to make a 100-ounce investment. They may borrow 50 ounces to make a 100-ounce investment.

In the commodity futures markets, people do borrow at very high ratios. But if the investment declines in value, the borrower receives what is

called a margin call. He must come up with additional money to maintain the contract. If he does not do this, his commodity broker will sell the contract, and he will be out whatever money he invested. Under extreme circumstances, he could become liable for a great deal more than his initial investment. This does not happen often, but it can happen. He is at risk for all of the money. The brokerage firm can then force him to pay this money out of his existing capital base. The commodity futures market is a highly uncertain market, and most investors do not profit in this market. It is a market limited to people with a great deal of money or middle-class people who are willing to bear a great deal of uncertainty.

The existence of debt enables successful investors to accumulate enormous wealth within one lifetime. What would have taken a family several generations to accumulate, one individual can accumulate within two or three decades. Most investors do not successfully use debt, and they disappear from the market. Successful investors do use debt, and they become dominant in their particular markets. This has led to large corporations that have significant market share. But these corporations rarely survive three generations. They accumulate enormous wealth by means of debt, but they dissipate this wealth over time. They do not maintain dominance on a permanent basis. In this sense they are like most families. The founder of a family may accumulate enormous wealth, but, over time, the heirs dissipate that wealth. *The regression to the mean reasserts itself.* These families no longer remain dominant in whatever field the founders initially established what looked like a dynasty. The market process enables the creation of large, successful companies in relatively brief periods of time, but then this same process shrinks the profitability of these older established firms. The more debt they have, the more vulnerable they are in times of recession.

2. Asymmetric Credit/Debt

Beginning in the late nineteenth century, this arrangement began to be modified by the advent of limited liability corporations. As these corporations multiplied after World War II in the United States and around the world, the risk of liability fell dramatically. Loans made to corporations have a limit: the net value of the corporation. Creditors cannot extract more money out of the corporation than the corporation possesses if the corporation defaults on its debts. It can declare bankruptcy, and the creditors will divide whatever assets remain after the sale of the corporation. They are not

allowed to demand payment by investors in the corporation. So, the liability associated with loans to corporations is borne more by lenders than by investors and managers of the corporation. This arrangement has led to escalating debt. Investors are willing to lend money long-term to corporations, even though they cannot be repaid beyond the money raised by the sale of the corporation's assets in a bankruptcy.

There is another aspect of corporate debt that is rarely discussed. It is an asymmetric investment. Let me explain. If an investor buys a 30-year bond from a corporation for one ounce of gold, and the bond pays 5% per annum, the bondholder becomes an entrepreneur. This is because the market value of the bond will vary inversely to the rate of interest that is applicable to the expiration date of the bond. If an investor buys when bonds of this risk pay 5%, and the interest rate falls to 2.5% shortly after the person has purchased the bond, the value of the bond will double or close to it. Why? In order for someone to gain the same rate of return on his investment that the previous bondholder gained on his investment, he will have to spend two ounces of gold to purchase the bond. The bond holder has reaped a speculative reward.

The company that issued the bonds earlier at 5% may have a large debt on its books. It may want to reduce that debt. So, it borrows money at 2.5% from new bond purchasers, and it uses this money to repay the original bondholders. The original bondholders had hoped to get 5% of their money for 30 years, but now they will not be able to do so. The companies reserve the right to pay off the bonds early.

On the other hand, what happens to the bondholder if the rate of price inflation rises, and the rate on the bond goes to 10%? Now the value of the bond falls by 50%. It takes only half as much money for a new investor to gain the same return on his investment that the original bondholder agreed to. So, the new investor is not going to buy a bond from an existing bondholder for anything like the amount of money the existing bondholder paid. Under these conditions, the company finds that it can pay off the 5% bonds because it is gaining more money as a result of its operations. The money is worth less, but it is useful for paying off bondholders at 5% per annum.

This is an asymmetric investment. An asymmetric investment is rather like this one: "heads, I win; tails, you lose." If the interest rate drops, the companies have the option of paying off the bond early, and thereby escape the obligation of paying off bondholders at the higher rate of interest. On

the other hand, if the interest rate rises, the companies then pay off the bonds on schedule with money that is worth less than it was when the original bondholders made the investment. The bondholders see the market value of their bonds fall because of rising interest rates.

This arrangement has placed bondholders at a disadvantage. It is better to be a borrower under these circumstances than it is to be a creditor. The combination of corporate ownership and central-bank inflation has created liabilities for bond holders that did not exist until the early twentieth century, and which accelerated in the second half of the twentieth century.

3. Government Debt

There is one form of indebtedness that does not suffer from the threat of early repurchase by the borrower. This is government debt. Governments issue debt that they are not legally allowed to pay off early. Furthermore, because governments are able to use the tax power to pay off their debts, they usually do not default. Hyperinflation is a form of default, but it has not been used in the industrial West above the equator since the hyperinflations of Germany, Austria, and Hungary after World War I. So, investors assume that they can safely invest in government debt, especially long-term bonds. For as long as central banks do not inflate sufficiently to create price inflation, thereby driving up long-term interest rates, and as long as governments continue to make regular payments on their debts, investors purchase government debts. The rise of government indebtedness, beginning with the outbreak of World War I in 1914, has proven to be relentless around the world. This money is not used for the purpose of increasing production. It is used to fund existing government policies and programs. The liabilities associated with government-guaranteed retirement programs, and especially government-funded medical programs for the aged, have now risen to levels that cannot possibly be repaid. The promises are a form of debt on the part of governments, and the governments will default on these debts. Those who have trusted in the governments to continue to make payments for their retirement pensions and their medical services will find that, as creditors, they have made disastrous investments for their entire working lives.

Conclusion

God tells His people to become creditors to covenant-breakers. The alternative is for covenant-breakers to become creditors to covenant-keepers.

This is evidence that credit and debt are inescapable concepts. It is never a question of avoiding credit/debt. It is a question of who extends credit to whom.

As individuals, covenant-keepers are supposed to run balance of payments surpluses, i.e., sell more to covenant-breakers than covenant-breakers buy from them. Covenant-keepers are to lend money to covenant-breakers. How can this take place? It can if covenant-breakers spend more of their money on goods and services sold by covenant-keepers than they spend on goods and services sold by covenant-breakers. The difference in the total is lent by covenant-keepers to covenant-breakers. Is this a way to enable covenant-breakers to enjoy additional income without present production? Yes.

The idea behind this arrangement is that covenant-breakers are more present-oriented than covenant-keepers are. They buy consumption goods now. Covenant-keepers thereby become owners of foreign capital, reaping a future return by lending in the present. By extending credit, they purchase the future productivity of covenant-breakers. This is another way by which God extends His rule over the earth in history. He allows His people to act as His stewards, purchasing the future output of covenant-breakers. Covenant-keepers buy back the capital of covenant-breakers. They establish a legal claim to an ever-growing proportion of the world's output. This passage, as with all of Deuteronomy 28, establishes the principle of methodological covenantalism. There are economic issues that are not dealt with accurately on the assumption that we must begin our economic analysis with either the autonomous individual or the corporate state.

35

BANKING

Then the servant who had received one talent came and said, 'Master, I know that you are a strict man. You reap where you did not sow, and you harvest where you did not scatter. I was afraid, so I went away and hid your talent in the ground. See, you have here what belongs to you.' But his master answered and said to him, 'You wicked and lazy servant, you knew that I reap where I have not sowed and harvest where I have not scattered. Therefore you should have given my money to the bankers, and at my coming I would have received back my own with interest' (Matthew 25:24–27).

Analysis

I have analyzed this in greater detail in Chapter 47 of my commentary on Matthew. This passage is the crucial New Testament passage on banking. It established the legitimacy of lending money at a rate of interest in commercial transactions. It refutes any argument that lending at interest is immoral. If the theologians and bishops in the early church had taken this parable at face value, they would not have issued prohibitions on interest. These prohibitions set back Christian business and entrepreneurship for well over a millennium.

Jesus' parable of the stewards appears in His most detailed discussion of the final judgment. The parable has to do with God's evaluation at the end of time of the productivity of His stewards. God imputes economic value to their performance, and He rewards them accordingly. Of course, this refers not simply to personal economic productivity, but to kingdom productivity. Jesus used the language of investing to describe the process of God's original ownership, His delegated transfer of ownership to His stewards, and His final accounting of their performance as stewards.

The greatest reward went to the steward who had been responsible for the largest amount of money, which he doubled. There was an economic

reason for this. It is more difficult to double a large investment portfolio than double a smaller one. The larger a capital base is, the more difficult it is to maintain a constant percentage rate of return. The second-greatest reward went to the steward who had been in charge of the second-largest amount of money, which he doubled. The penalty was imposed on the steward who buried his coin, and who returned it at the end of his period of stewardship. The owner announced his condemnation of this steward. The steward had attempted to deflect attention from his own lack of performance by accusing the owner of being a harsh man who profited from other people's productivity. He reaped, yet supposedly he did not sow. This is the perpetual argument of all haters of capitalism. They blame the capitalists for being exploiters. The owner cited this accusation back to the steward. He implicitly asked the obvious question: "Why didn't you turn my money over to the bankers, who would have paid a rate of interest on this money?"

Jesus' listeners would have recognized the nature of the steward's lack of performance. He had been given authority over the investment of the coin. He had done nothing creative with it. He had produced a loss for the owner, namely, the money that the owner would have received if the steward had simply handed the money over to local bankers, and had them invest the money. He would at least have received a rate of interest on his money, which was not his money, but which belonged to the owner.

This owner's statement unquestionably validates the legitimacy of banking as a business. Otherwise, Jesus would not have used the example of banking as a legitimate way for the steward to have performed a positive service to the owner. The greatest reward went to the most skilled entrepreneur. But the complaining steward would at least have received some praise for his investing skill, even though it involved only turning money over to bankers. Instead, the owner took the coin and transferred it to the most successful investor. This is the biblical pattern for the final judgment: "The rich get richer, and the poor get poorer." Covenant-keepers gain everything; covenant-breakers lose everything. The poor man in this case was a man who had a bad attitude towards wealth in general and toward the owner of the coin specifically. It was not just that he was a bad investor. It was that he was a morally corrupt person. He was in rebellion against the system of private property that God had established in the garden, and had reinforced through the Mosaic law.

God has established a system of property management in which the rich get richer, and the poor get poorer. But this second outcome applies only to the final judgment. It does not apply to history. *The process of capital creation and entrepreneurship in history leads to an increase in wealth for rich and poor. This is a tremendous benefit of the free market system.* It is not a zero-sum process. It is not like gambling. The rich do not profit at the expense of the poor. Only at the final judgment is this system revealed to be a zero-sum wealth-transfer process. Here is its general principle: "Disaster runs after sinners, but righteous people are rewarded with good. A good person leaves an inheritance for his grandchildren, but a sinner's wealth is stored up for the righteous person" (Proverbs 13:21–22). [North, *Proverbs*, ch. 41] Paul taught this: at the end of time, God the Father will place all things under the rulership of Christ. Then Christ will transfer everything that He has been given by God the Father back to God the Father. "Then will be the end, when Christ will hand over the kingdom to God the Father. This is when he will abolish all rule and all authority and power. For he must reign until he has put all his enemies under his feet. The last enemy to be destroyed is death. For 'he has put everything under his feet.' But when it says 'he has put everything, it is clear that this does not include the one who put everything in subjection to himself. When all things are subjected to him, then the Son himself will be subjected to him who put all things into subjection under him, that God may be all in all" (I Corinthians 15:24–28). [North, *First Corinthians*, ch. 17] Then God the Father will transfer this bride price from Christ to the church as the church's dowry. This will consummate history: the marriage supper of the lamb (Revelation 19:6–9). I discuss this in Chapter 49.

After they die, covenant-breakers forfeit ownership of all of the wealth they accumulated in history. They are judged for eternity in terms of their performance as builders of the kingdom of mammon. The more wealth that they accumulated or spent on themselves in the service of mammon, the more terrible their judgment. Jesus taught this clearly. I have cited this passage before, but it is so important, that I cite it again.

> The Lord said, "Who then is the faithful and wise manager whom his lord will set over his other servants to give them their portion of food at the right time? Blessed is that servant whom his lord finds doing that when he comes. Truly I say to you that he will set

> him over all his property. But if that servant says in his heart, 'My lord delays his return,' and begins to beat the male and female servants, and to eat and drink, and to become drunk, the lord of that servant will come in a day when he does not expect, and in an hour that he does not know, and will cut him in pieces and appoint a place for him with the unfaithful. That servant, having known his lord's will, and not having prepared or done according to his will, will be beaten with many blows. But the one who did not know and did what deserved a beating, he will be beaten with a few blows. **But everyone who has been given much, from them much will be required, and the one who has been entrusted with much, even more will be asked**" (Luke 12:42–48; emphasis added).

This principle of wealth transfer by God applies to every individual at the time of his death. It also applies to world capital at the end of time. *This capital extends into eternity.* It will become the capital base for individuals living in the post-resurrection new heavens and new earth. It is the final inheritance of history. In the free market social order, men prosper because they have served consumers well. The rich get richer, and so do the poor. But the long-term economic system really is a zero-sum process. After the final judgment, covenant-keepers become the heirs of covenant-breakers. The model is the rebellious steward.

A. The Service of Banking

There are people who wish to lend. The Bible teaches that covenant-keepers who have accumulated wealth are supposed to become lenders. "The lord will open to you his storehouse of the heavens to give the rain for your land at the right time, and to bless all the work of your hand; you will lend to many nations, but you will not borrow. The Lord will make you the head, and not the tail; you will be only above, and you will never be beneath, if you listen to the commandments of the Lord your God that I am commanding you today, so as to observe and to do them" (Deuteronomy 28:12–13). This is an aspect of the process of dominion. [North, *Deuteronomy*, ch. 70]

An individual is entitled to lend money in search of a positive rate of return on his wealth. He must assess the creditworthiness of potential borrowers. This takes specialized information. The outcome of a loan to one

individual or one business is uncertain. There is no formula comparable to an insurance contract that is based on the law of large numbers. Most individuals therefore do not want to take the responsibility of becoming professional lenders. It takes too much information. It also takes much capital to spread across a large number of borrowers, thereby reducing uncertainty of default on the part of the borrowers. Only a few individuals feel secure enough or knowledgeable enough to become professional lenders. We call these people bankers. (If they lend at very high rates of interest to people in a crisis, we call them loan sharks.)

1. Traditional Banking

An individual who invests only his own money is a creditor. He does not owe anyone money. He is limited by his own supply of capital. If he wishes to make even more loans, thereby reducing the uncertainty of default because he can rely on the law of large numbers to protect him, he will have to become a banker. A banker is a borrower. He will have to go to potential depositors, meaning lenders, to persuade them to let him manage the lending of their money. If he is successful, everybody wins. The depositors win because they receive a guaranteed rate of return on their investment. The banker wins because he makes money on the difference between the rate of interest that he pays the depositors and the rate of interest that he collects from the borrowers. The borrowers benefit because they have the use of money during the period of the loan.

Prior to the development of consumer credit in the United States in the 1920s, bankers focused on lending money to governments and businesses. This was the focus of the parable of the stewards. People with expertise in the value of coins, called moneychangers, also were experts in lending money to businessmen. The businessmen would put this borrowed money to what they hoped would be profitable uses. They took on debt in order to finance projects that they would not otherwise have been able to afford. They became part of a pool of borrowers. If one of them failed to make a profit, and he defaulted on his loan, the banker would not lose all of the money he had loaned out. *The banker had converted uncertainty into risk*. He was better able to manage this risk because there was a large pool of borrowers.

Bankers are specialists. They possess specialized information about debt markets. They profit from this specialized information. This is what all profit-seeking businessmen do. This information is not obtained free of

charge. It involves the use of specialized mathematics. In the days of Jesus, this mathematics was computed in Roman numerals. It continued to be computed in Roman numerals in the West until the fifteenth century. Lenders had to calculate rates of interest. They had to monitor repayment. They had to have collection techniques to use against borrowers who delayed payment. None of this was common in society. These were specialized techniques that were available only to full-time experts in the field of lending.

In order to gain leverage for their knowledge, bankers began to take in deposits from rich people who had money to lend. They would guarantee a rate of interest on these deposits. They would then leverage their information regarding reliable borrowers. They could lend to far more borrowers because they had taken in deposits from nonspecialists who wanted to increase their wealth at a steady rate. The rate that the bankers paid to depositors was less than the rate that they collected from lenders. They made their profits from the difference between the rate of interest charged to borrowers and the rate of interest paid to depositors. This was the "spread" between interest rates.

Specialized information has to be paid for. A common person with money to lend does not have this information. He is not a specialist. If he does not wish to reinvest the money in his own business, he has the opportunity of investing a portion of that money in making loans to other businessmen. For someone who wants to increase his wealth on a more passive basis, he can search out bankers who will put his money to suitable use. At the end of the period of deposit, the depositor will receive back more money than he had deposited.

There is risk. A bank may go bankrupt. By using multiple bankers in the community, a depositor (lender) can decrease the impact on his net wealth by the failure of a single bank. He diversifies his investment portfolio by having multiple sources of income.

Because of banking, businessmen are able to focus on what they do best in their particular markets. They can leverage their profits by borrowing money. They increase the amount of production goods and labor services they control in order to meet future consumer demand. At the same time, the banker leverages his opportunities by taking in money from depositors and using this money to lend to a larger number of businesses. This reduces his risk of loss from the failure of any particular business. It also enables

him to make loans to businesses in more than one segment of the economy. This reduces the likelihood that he will not be repaid. Businessmen are debtors to bankers. Bankers are debtors to depositors. The system enables a higher rate of return for depositors, who are the original sources of capital. They gain steady income at a lower risk than would have been the case if they had attempted to become bankers themselves.

2. Consumer Credit

In Chapter 30, I discussed the difference between present-oriented people and future-oriented people. The difference in these mindsets regarding the value of time is manifested in the willingness of present-oriented people to borrow money, and the willingness of future-oriented people to lend money at a rate of interest that borrowers are willing to accept. *A transfer of wealth over time takes place from present-oriented people to future-oriented people.* This is part of the dominion process. The present-oriented person is governed by this outlook. "The dogs have big appetites; they can never get enough; they are shepherds without discernment; they have all turned to their own way, each one covetous for unjust gain. 'Come,' they say, 'let us drink wine and liquor. Tomorrow will be like today, a day great beyond measure'" (Isaiah 56:11–12). It is not illegitimate for people with money to lend to people who want immediate consumption. This has accelerated around the West and around the world since the 1920s. Consumer debt has become a major source of profits for banks.

The first major industry to become dependent on consumer debt was the automobile industry. Beginning in 1919, General Motors began lending money to consumers who wanted to buy General Motors automobiles. General Motors replaced Ford Motor Company as the major producer of automobiles in the United States by the end of the 1920s. This success was imitated. It revolutionized modern retail selling.

Long-term mortgages became common in the United States, beginning in 1934. The federal government established an agency which guaranteed that deposits made in building and loan associations would be guaranteed by the power of the federal government. This subsidized the creation of long-term mortgages with low down payments. Beginning in 1946, following World War II (1941–45), consumer credit began to become widely used in the United States. The development of the credit card, beginning in the mid-1960s, accelerated the use of consumer credit.

Credit card debt is unsecured debt. This means that the debt is not collateralized by an asset that can be repossessed by the creditor for nonpayment of the debt. It is not like an automobile debt or a mortgage debt, which are high-value assets. In the case of a high-value asset, a creditor can take a person to court and gain ownership of the collateralized asset that undergirded the loan. But this is not possible with the kinds of expenditures made by people who use credit cards to buy consumer goods and services. So, the risk of default is higher with these loans. Therefore, the rate of interest paid by borrowers is higher than it is for secured loans.

B. Critics of Banking

For centuries, the Catholic Church opposed all interest from loans. This was a misinterpreted reading of the Mosaic laws prohibiting interest on charitable loans. There was no biblical injunction against interest on business loans. The church always ignored Jesus' parable of the talents. The medieval church maintained the early church's misinterpretation. The second Lateran Council of 1139 issued this statement: "We condemn that practice accounted despicable and blameworthy by divine and human laws, denounced by Scripture in the Old and New Testaments, namely, the ferocious greed of usurers; and we sever them from every comfort of the Church, forbidding any archbishop or bishop, or an abbot of any order whatever or anyone in clerical orders, to dare to receive usurers, unless they do so with extreme caution; but let them be held infamous throughout their whole lives and, unless they repent, be deprived of a Christian burial."

The premier historian of the Catholic Church's position on usury/interest was an American judge, professor, and distinguished Catholic historian, John T. Noonan. His Ph.D. dissertation was published by Harvard University Press in 1957, *The Scholastic Analysis of Usury*. It remains definitive. In 1999, he wrote this summary of the Church's shift in views. The article appeared in the Catholic magazine, *America*. "Beginning about 1150 the moral rule was laid down that it was wrong to make a profit from a loan. 'Lend freely, hoping nothing thereby,' was papally interpreted as a commandment. Popes, councils, bishops, theologians joined in the condemnation of usury, understood as anything added to the principal of a loan. In the 16th century, as the economy of Europe became more commercial, profitable alternative ways of extending credit were recognized by theologians engaged in a fierce battle with curial conservatives. By the 18th century the old usury

rule was a shadow, formally maintained by the papacy, ineffective in practice. By the 20th century, investments in banks were commonplace for popes, bishops and ordinary Christian folk. What had been prohibited had become lawful."

Within Roman Catholic circles, there is a tiny minority of social commentators who are not economists, and who still oppose all taking of interest. They want the Pope and the church's courts to return to the view held in the twelfth century. They have no influence in the church.

Another group of obscure anti-interest non-economists is the remnant of a late nineteenth-century American fringe political movement known as the greenbackers. These people were defenders of the United States government's issue of unbacked green paper money during the Civil War. From 1874 to 1889, there was a Greenback Party. It promoted the idea of government-issued fiat money as the basis of interest-free loans to the American people. The intellectual heirs of this political party reprint books attacking interest that were published in the 1930s by obscure Catholic theologians and pastors. I deal with this movement and its ideas in my short book, *Gertrude Coogan's Bluff*, published by the Mises Institute, which is an updated version of a private paper that I wrote in 1965 for my father-in-law, R. J. Rushdoony. I have published a detailed critique of the most prominent modern greenbacker, Ellen Brown, on my website. (http://bit.ly/BrownCritique)

Conclusion

There is no biblical prohibition on commercial banking. Banks perform an important service: serving as intermediaries between depositors who want to lend money and borrowers. Bankers evaluate the creditworthiness of potential borrowers. This reduces the uncertainty associated with default. By lending to a broad base of borrowers, banks diversify the risk of default. Bankers are able to perform this service because they possess specialized information of credit markets in general. Individual depositors do not have this information. Banks make their profits from the difference between interest paid to the banks by borrowers and interest paid by the banks to depositors. *The crucial service here is the transformation of uncertainty into risk.*

Fractional reserve banking is not the same as biblical banking. I discussed fractional reserve banking in Chapter 27.

36

THE BUSINESS CYCLE

He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today (Deuteronomy 8:16–18).

Analysis

I analyzed this passage in detail in Chapter 22 of my commentary on Deuteronomy. This is the central passage in the Bible that establishes biblical social theory. It establishes a system of positive sanctions. This system is supposed to be self-reinforcing. There is supposed to be positive feedback with respect to economic growth. This positive feedback is supposed to confirm the nation in its commitment to the God of the Bible.

There is a threat inherent in economic growth. This threat is the lure of autonomy. People may conclude that their own wisdom is the source of their wealth. Under these circumstances, positive sanctions are not a blessing. They are a prelude to a curse. It is the curse associated with unbelief. Unbelief will lead to negative sanctions. "It will happen that, if you will forget the Lord your God and walk after other gods, worship them, and reverence them, I testify against you today that you will surely perish. Like the nations that the Lord is making to perish before you, so will you perish, because you would not listen to the voice of the Lord your God" (vv. 19–20).

Leviticus 26 and Deuteronomy 28 are both devoted to the system of sanctions. They are not limited to economic sanctions, but they include economic sanctions. The goal of the negative sanctions is to bring the nation, meaning the rulers and the ruled, back to faith in God. The ultimate sanction for Israel was national captivity (Deuteronomy 29:28). This would not be permanent. God would return them to the land (Deuteronomy 30:3–

5). [North, *Deuteronomy*, ch. 72] This took place in Israel's history. It culminated in the fall of Jerusalem. The church then replaced Israel as the favored nation, as Jesus said it would. "Jesus said to them, 'Did you never read in the scriptures, "The stone which the builders rejected has been made the cornerstone. This was from the Lord, and it is marvelous in our eyes"? Therefore I say to you, the kingdom of God will be taken away from you and will be given to a nation that produces its fruits'" (Matthew 21:42–43).

A. Linear History and the Idea of Progress

The biblical doctrine of progress is an extension of the biblical concept of linear history: creation, fall, redemption, and final judgment. Progress is not an inherent doctrine of linear history. Linear history in the ancient world was held only by two groups: Jews and Christians. All other systems of historical interpretation were cyclical. Outside of the nation of Israel, there was no document supporting the idea of progress until Christianity emerged.

1. Questioning Social Progress

Linear history had profound effects in the development of Western civilization. It meant that there could be permanent progress within the Christian church. But this view of linear history was always ambivalent about the doctrine of social progress. There can be no permanent reversal of the extension of the kingdom of God in history. There are ups and downs, but there can be no permanent reversal. This is not the same as saying that civilization as a whole will also experience progress. To argue that way would involve arguing that the kingdom of God will eventually extend its influence over the face of the earth, thereby replacing the kingdoms of men. This was not held by anybody until the early 1600s. The question arose: "Is this progress irreversible culturally?" The general attitude of the Christian church until the seventeenth century was this: there will never be permanent progress. The kingdom of God will extend in history, but the various kingdoms of man will rise and fall. This outlook goes back to Augustine in the early fourth century.

It is a debate over eschatology. Premillennialists have believed that Christ will return bodily to set up a thousand-year kingdom. There will be progress on a permanent basis after this. However, we should not expect anything like this kind of progress prior to the return of Christ to set up his kingdom. In contrast to this is the position of amillennialism, which was

Augustine's position. Jesus will not return until the final judgment. Until then, the kingdoms of man will rise and fall.

In the seventeenth century, a new view began to be promulgated in Calvinist circles: postmillennialism. This began in the Dutch Republic during the time of the revolt against Spain in the first half of the century. It spread to Scotland. Some of the Puritans adopted it. It was a prominent outlook during the first generation of New England Puritanism from 1630 until the restoration of Charles II in 1660. Its defenders argued that there will be an expansion of the kingdom of God in history due to evangelism. Postmillennialism was not universally held, but it became prominent as the century developed. There was a growing confidence that the kingdom of God will have greater prominence, eventually replacing the kingdoms of man. There will then be increasing correspondence between covenant-keeping and growing wealth. This outlook offered optimism regarding the possibility of social and economic transformation in history. The setbacks of life will not be permanent. These setbacks will lead to repentance, and repentance will lead to a restoration of the positive economic feedback that is described in Deuteronomy 8:15–18.

2. A New Optimism

Accompanying postmillennialism was an increasing optimism about economic progress. The Dutch Republic began to experience economic growth through international trade in the late 1500s, despite the costs of the eighty-year war against Spain (1568–1648). This growth continued until the 1670s.

This optimistic outlook began to spread into non-Christian thinking in Western Europe. By the end of the seventeenth century, the new optimism was associated with Newtonian science. Newton was a secret Unitarian. If he had admitted this publicly, he would have been fired from his professorship at Cambridge. His disciples began to spread the gospel of mathematical science as the proper tool of understanding in all human affairs. A new confidence in the scientific transformation of the world began to take hold in intellectual circles. This continued through the eighteenth century. The Enlightenment of both Scotland and the European continent secularized postmillennialism. It led to a confidence regarding the ability of man to transform his world. This was the ancient lure that Moses had warned about in Deuteronomy 8: the lure of autonomy.

If society is constantly experiencing economic development, then the ups and downs of national or international economic life are peripheral to the general progress of civilization and the accompanying economic growth. In other words, there is a long-term pattern of economic expansion, but within this framework, there can be and have been periods of economic setbacks for nations and for the world economy. These setbacks are not permanent.

Economists debate about the origin of these setbacks. There are cycles of boom and bust, but always within the pattern of constant economic development, technological improvement, and scientific innovation. This outlook has become almost universal among professional economists. They believe in long-term economic growth, but they also attempt to offer explanations for the periods of recession and even depression that accompany long-term economic growth. Economists generally are secular postmillennialists. They believe in the idea of progress, and they believe that economic growth can be sustained indefinitely. They investigate the business cycle as deviations within the general framework of compound economic growth.

B. Banking and the Business Cycle

The first great bank failures in the West took place in the 1340s when the banking houses of two Italian families, the Perruzi and Bardi, failed in a three-year period. The Peruzzi bank went bankrupt in 1343. The Bardi bank went bankrupt in 1346. In 1348–50, the bubonic plague wiped out something in the range of one-third of Europe's population. This launched the beginning of the Renaissance. This was the last great biological catastrophe to strike Western Europe. The economy recovered within a generation. The Renaissance was one aspect of this recovery.

Bank failures have marked Western economic history ever since. Fractional reserve banking is inherently unstable. The expansion of the money supply creates a boom, as we shall see, and then the boom turns into a bust. Contraction follows expansion. But then expansion follows contraction. Optimism returns. Investment returns.

1. Mises' Theory of the Cycle

What is the relationship between fractional reserve banking in the business cycle? The answer was provided in 1912 by Ludwig von Mises in his book, *The Theory of Money and Credit*. He argued that the expansion of the money supply that takes place as a result of the expansion of bank re-

serves beyond the size of bank deposits lowers rates of interest. Banks have extra money to lend, and the only way that they can persuade borrowers to borrow the newly created money at interest is to lower the rate of interest. *An increase in the supply of money leads to a temporary reduction in the price of borrowing money.*

The newly created money enters the economy at specific points. When he wrote his book, the development of consumer credit was a decade away in the United States. So, he argued that the newly created money is borrowed by businessmen. They can borrow at a lower rate of interest. They are tempted to borrow the money in order to expand production. They see that certain investments that did not seem profitable at the older, higher rate of interest now appear to be profitable because of lower rates of interest. Businessmen take advantage of these lower rates by borrowing the money to expand production.

Mises argued that these lower rates of interest were based on deception. If people had become more future-oriented, and if they were willing to save money in order to increase their wealth in the future because of interest payments, there would be no problem. But, he argued, people's rate of time preference had not dropped. They were not more future-oriented than before. So, the reduced rate of interest was an illusion. The public was unwilling to lend money at lower rates of interest. Banks were willing to lend money at lower rates of interest, but only because they had created this money as part of the process of fractional reserve banking. Thus, there would be a problem later in the economic development process. People were unwilling to save money. They wanted to spend money. Interest rates would go back up. Only a new round of monetary inflation could force rates down. But this would not be permanent. The inflationary money would begin to have an effect on prices. Prices would rise. People would spend money to buy consumer goods. But, unless there were new rounds of monetary inflation, they would not be able to continue to spend at the recent rate of spending.

Entrepreneurs had made long-term plans on the assumption that interest rates would stay low. They had assumed that they would be able to complete their projects and sell the output at a profit. Then the rising money supply would begin to raise long-term interest rates: the inflation premium in loans. Businessmen would no longer be able to borrow money at low rates to complete their various entrepreneurial projects. At this point, they would begin to close down the projects. They would begin to sell off capital assets

that they had thought would become productive at some point in the future. They would begin to fire employees. This is the contraction phase.

Mises asked a relevant question. Why is it that large numbers of entrepreneurs make the same kinds of investment mistakes at the same time? Normally, entrepreneurs are in competition against one another. Some are expanding their businesses; some are not. Some are profiting; some are not. There is no pattern associated with their losses. But, in a time of economic recession, large numbers of entrepreneurs find that they had made the same mistake at the same time. They had bought production goods and hired laborers in the hope that there would be greater demand for their output. Why did they make the same mistake at the same time? There had to be some common factor that led them to make the same kinds of errors at the same time. Mises identified this common factor: the banking system. Specifically, it was the low interest rates produced by the fractional reserve banking system. The rates were lower than what market rates would otherwise have been. There was a distortion in the pricing system, meaning the interest rate, that normally allocates present consumption in relation to future consumption.

Mises' theory is a theory of *misallocated capital*. The false signals provided by the low interest rates lure businessmen into a mistake. They believe that future consumer demand will be higher than it turns out to be. They also believe that interest rates will stay low during the period of capital formation. But rates begin to rise as a result of price inflation. Why? Because lenders want a higher rate of return in order to compensate them for the falling purchasing power of money. Rising rates force marginal businesses to end their projects. The prices of capital goods begin to fall. Businessmen sustain losses. In an attempt to reduce the extent of these losses, they begin firing workers. Unemployment rises. Inventories of capital equipment are sold at discount prices. The prices of consumer goods fall because of the sale of inventories. The economy goes into recession.

2. Competing Explanations and Policies

There are several competing explanations for what causes business cycles. There are also competing suggestions for what national governments and central banks can do to alleviate the effects of the contraction phase. Keynesians favor large government deficits and also the purchase of government debt by central banks by means of the expansion of the monetary

base. The central banks must create money out of nothing, and then use the money to buy debt issued by the national government. In contrast, Austrian School economists believe that central banks should not expand the money supply because this will introduce another round of malinvestment Governments should cut spending and reduce budget deficits. They should allow the market process to re-price capital goods and labor.

The Austrian theory had defenders during the Great Depression. F. A. Hayek, a disciple of Mises, wrote *Monetary Theory and the Trade Cycle* in 1932. It was published in 1933. Lionel Robbins, also a disciple of Mises, wrote *The Great Depression* in 1934. He followed Mises' theory. A trio of economists wrote a book in 1937, *Banking and the Business Cycle*. They also followed Mises' theory.

In between, John Maynard Keynes wrote *The General Theory of Employment, Interest, and Money*. It appeared in 1936. Keynes' ideas became dominant within a decade. Keynes defended the policies of deficit spending and central bank money creation that all Western governments had adopted by the mid-1930s. His message, when interpreted by economists who could communicate more effectively than his book did, was what national political leaders wanted to hear: *run large deficits*. It was also what a generation of younger economists wanted to hear. Like the politicians, they had lost faith in the market process as a means of eliminating depression and launching a new phase of economic growth. They were convinced that the government had to intervene.

C. Economic Recoveries and Rising Expectations

Economic booms and busts have accompanied the process of compound economic growth that began around 1800. The first American depression took place in 1819. Murray Rothbard wrote his doctoral dissertation about this depression. In 1837, another depression took place in the United States. In 1857, another depression hit. These depressions did not last long. The market process led to a re-pricing of capital resources. Economic growth began again.

There was a series of depressions in the West, beginning in 1873 and recurring in the early 1890s. This culminated in the American banking panic of 1907. The Federal Reserve System began operating in 1914. Yet this era, 1879–1913, was marked by the most rapid economic growth in American history.

Every Western nation has had booms and busts, but the worst was the depression of the 1930s. It was worldwide. Economic growth ceased in this decade. It was the only decade after 1800 in which economic growth ceased. These business cycles did not end compound per capita economic growth above 2% per year.

Critics of the free market have argued that the business cycle is endemic to capitalism. There is a fundamental failure in the capitalist system, they insist. Generally, these critics have argued that the major failure of the free market economy is that there is insufficient demand on the part of the broad masses of the population to sustain long-term economic growth. Some critics argue that capitalism suffers from overproduction. Others argue that it is a problem of underconsumption. All of the critics blame the distribution of wealth. The rich have too much money.

The Pareto distribution of wealth does not change much, decade to decade. This 20-80 distribution is a familiar pattern in the West. No economic reforms fundamentally change the distribution. Most of the investment in any society is provided by the 20% in the top income bracket. The higher up this distribution we look, the greater the percentage of invested capital. The rich cannot possibly consume all of their wealth. They are the source of capital accumulation that most economists believe is the source of rising per capita wealth. If they misallocated, there ought to be an explanation for this. Mises has provided such an explanation.

1. Optimism

The periods of recovery last longer than the periods of contraction. Governments continue to run deficits. This has been true ever since 1930. They run them in boom periods. They run even greater deficits in recessions. Far larger debts are the politicians' promises made to retirees that they will receive financial support and low-cost medical care. These unfunded liabilities dwarf the official deficits of the various nations in the West. There is a statistically looming crisis for Western governments. They cannot possibly deliver on the political promises made by two generations of national politicians. The money will not be available to governments to meet these promises. There is no agreed-on solution to this problem. Politicians will not admit publicly that there is a discrepancy between the promises made and the level of taxation necessary to fulfill these promises. We might call this the political misallocation of promises.

Voters have become confident that long-term economic growth is now inevitable. Technological progress continues to accelerate. This is especially true in the realm of digital innovation. There is a widespread belief that the power of men's hands and minds has made the world rich. For the first time in history, it looks as though it will be possible to eliminate starvation-level poverty within a generation. This intense optimism about the economic future of mankind is becoming widespread. Men believe that there can be temporary economic setbacks in the form of recessions, but they do not believe that these setbacks are permanent. This is a kind of *secular economic postmillennialism*. This outlook became common within the non-Christian intelligentsia in the West in the late eighteenth century. Today, there is economic evidence to support such an outlook.

2. A Looming Collision

For those who look at the unfunded liabilities of Western governments, and who also look at rising per capita economic growth around the world, there appears to be an inevitable collision between the fiscal reality of national governments and the economic reality of the market process. The market process continues to deliver the goods and services that people want to buy, and it does so at prices they are willing and able to pay. But, in the political realm, there is a disconnect. The statistical evidence of a monumental fiscal crisis is not widely known among the general public, and at the national level, politicians simply ignore what statisticians and a handful of forecasters insist is going to happen.

The last time that there was a disconnect of this magnitude was in the Great Depression. It was during this time that Keynes and Keynesians offered an alternative to the free market economic theory that had prevailed in the West ever since Adam Smith, with the main exception of Marxism. By late 1940s, Keynesianism began to replace all rival forms of free-market economic theory. One book was dominant in the college classroom: Paul Samuelson's *Economics*. It was published in 1948, and it became the largest-selling college textbook in the second half of the twentieth century. I discuss this book in Chapter 42.

If there is another economic crisis comparable to the Great Depression, and if this coincides with the fiscal insolvency of national governments, and if central banks refuse to inflate in order to bailout central governments because of the bankers' fear of hyperinflation, there will be a rethinking of

Keynesian economics and the political system that has been built on the assumption of the validity of Keynesian economics. Keynesian economists will insist on greater fiscal deficits, but politicians will be facing the insolvency of national governments. The political battle over the resolution of the problem of the unfunded liabilities will be at the heart of Western politics until such time as it becomes politically feasible to default on these unfunded liabilities.

The optimism regarding compound economic growth and also government-funded retirement programs will be shaken. Millions of people will lose faith in the market process. Other millions will lose faith in the political process. It is not clear how this allocation of optimism and pessimism will take place.

Optimism is a crucial economic resource, although it is not for sale in organized markets. This optimism has been dominant in the West for over three centuries. The economy for the last two centuries seems to have validated this optimism. It has long been argued by scholars that times of political revolution are preceded by rising optimism among the political masses and also the intellectual elite. This is sometimes called *the revolution of rising expectations*. Then there is a setback. When these rising expectations are thwarted, intellectual and political revolutions sometimes take place. The West has been living in a period of rising economic and political expectations ever since the late eighteenth century. There have been revolutions along the way. The American Revolution, which began in 1775 and was not settled politically until 1788, was followed by the French Revolution, which prevailed from 1789 until 1794. Then came the Russian Revolution in 1917. Each of these revolutions had been preceded by the optimism of revolutionary intellectuals. The Chinese Communist revolution in 1949 was an extension of the Russian Revolution. Communism seemed to be the wave of the future. But this wave was in retreat by 1979 in China and by 1991 in the Soviet Union. No worldview has replaced the intellectual corpse of Marxian Communism, whose bodily representation is the encased corpse of Lenin in Red Square in Moscow.

D. Banking Reform

The century of the gold coin standard, which began at the end of the Napoleonic wars in 1815 and ended at the beginning of the First World War in 1914, was an era of stable money, rising productivity, and either stable or

falling consumer prices. Common men had a common currency. Sometimes, they made their transactions in silver coins. The Spanish coin known as the Spanish dollar (piece of eight) was dominant in the United States from the early colonial period until 1857. It was a stable currency. It had been stable ever since its introduction in 1497.

Today, there is no physical commodity that serves as the primary monetary base for any central bank. The interest rate in the bond market is a major factor retarding the expansion of unbacked digital money. In the past, long-term bond rates have been between 3% and 5%. These rates have reappeared in the free market after recessions. The extremely low rates of government bonds and corporate bonds during the Great Depression were temporary. Most economists believe that the low rates that have prevailed since 2008 are also temporary. While they may be another period of low rates for government bonds as a result of an international recession, when investors seek safety, economists do not believe that a period low interest rates or even negative interest rates will prevail. This raises a series of questions. What degree of the re-pricing of capital will be required in order to restore economic growth? Will the market process be allowed by politicians to re-price capital? How long will it take for the market process to reassert its authority over the pricing of capital? What kinds of economic theories will be offered to justify either the political pricing of capital or the market pricing of capital? Which theories will prevail?

For as long as there is fractional reserve banking, there will be boom-bust cycles. For as long as national and regional governments regulate entry into the market for banking, there will be fractional reserve banking. Government control over the entry into the market establishes a cartel for the banking system. Central banks will continue to protect the largest banks in the system. A free banking system would place authority into the hands of solvent banks that would demand payment by suspected insolvent banks. This was the system that Mises recommended. "Free banking is the only method available for the prevention of the dangers inherent in credit expansion. It would, it is true, not hinder a slow credit expansion, kept within very narrow limits, on the part of cautious banks which provide the public with all information required about their financial status. But under free banking it would have been impossible for credit expansion with all its inevitable consequences to have developed into a regular—one is tempted to say normal—feature of the economic system. Only free banking would have ren-

dered the market economy secure against crises and depressions" (*Human Action*, XVII:12).

Murray Rothbard recommended 100% reserve banking, but since he was an anarchist, he did not believe that there should be a civil government to enforce such a requirement. He never explained how 100% reserve banking could be established and enforced apart from a civil government. Thus, operationally, he also believed in free banking. The problem with civil governments in an era of fractional reserve banking is simple: politicians do not understand monetary theory, and they leave it to the banking cartel, which the government has created, to make the decisions regarding reserve requirements. A national government should not have the authority to establish 100% reserve banking. This would be the authority to establish something less than 100% reserve banking. Reserves should be established by the market process. This was Mises' position. It is consistent with the biblical law prohibiting multiple indebtedness: the same coat serving as collateral for many loans (Exodus 22:25–26). The enforcement of this law was voluntary. The lender could require the return of the collateral every morning, but this was not required by biblical law. This is the equivalent of free banking. [North, *Exodus*, ch. 49:J]

The market itself should be the dominant force in the restoration of monetary policy. No central planning agency will be successful in designing a banking reform system that will overcome the problem of the boom-bust cycle. Instead, the world needs a retreat of civil government out of banking affairs, including regulation, other than enforcing contracts. The first step would be for national politicians to sever all connection between the nation's central bank and the national government. It should be left to compete without government support. This was done in the United States with the First Bank of the United States (1791–1811), a privately owned bank, and the Second Bank of the United States (1816–1836), a privately owned bank. The government allowed each of the banks' 20-year charters to lapse. Without government support, both banks soon went bankrupt. The United States did without a central bank from 1836 until 1914.

Conclusion

There is no explicitly biblical theory of the business cycle. There is no indication that the ancient world suffered from business cycles. We must therefore look to other aspects of Christian economics, specifically the

question of dishonest money, in our quest to explain the business cycle.

Mises developed a comprehensive theory of the relationship between fractional reserve banking and the business cycle. His theory of what constitutes honest money is consistent with the Bible's revelation of what constitutes honest money. Honest money for millennia was established by precious metals. But whether precious metals can ever again be placed at the foundation of the digital monetary systems of various nations remains an open question.

The industrial West has avoided hyperinflation ever since 1924. It did not do this on the basis of the gold coin standard. That standard had been abolished by national governments a decade earlier. The end of the gold coin standard in the United States came in March 1933. The end of the international gold exchange standard came on August 15, 1971. Ever since then, fiat money, which is primarily digital money, has ruled the world unchallenged. Fractional reserve banking, which is administered by central banks, has resulted in a series of recessions around the world. But economic growth has continued for most of this period. The recovery periods have lasted much longer than the contraction periods.

Rising per capita debt, especially government debt, has accompanied both the booms and the busts. If the unfunded liabilities to retirees are counted, then this growth in civil government that must be seen as irreversible until such time as the solvency of national governments is threatened by the rising payments to retirees.

Paul wrote that we see through a glass indirectly (I Corinthians 13:12). We cannot see much of the future. We do not know which ideas will become dominant. But we know this much: central banks in the West have resisted the temptation of hyperinflation ever since 1924. But they have not resisted the temptation to intervene in the national economies during times of recession. They have always inflated. They have always preserved the largest commercial banks from failure. They have done so by the expansion of fiat money.

With respect to the business cycle, the questions now are these. First, will central banks be able to continue their policy of preventing large banks from going bankrupt? Second, will there be bankruptcies of major banks that lead to years of economic recession? If central banks fail in their attempt to restore economic growth, there will be a great intellectual battle over the question of what went wrong. This battle will be accompanied by

political battles over the correct policies to restore the economic growth rate of national economies. The answers will be clearer in half a century. They are not clear today.

37

ECONOMIC GROWTH

If you listen carefully to the voice of the Lord your God so as to keep all his commandments that I am commanding you today, the Lord your God will set you above all the other nations of the earth. All these blessings will come on you and overtake you, if you listen to the voice of the Lord your God. Blessed will you be in the city, and blessed will you be in the field. Blessed will be the fruit of your body, and the fruit of your ground, and the fruit of your beasts, the increase of your cattle, and the young of your flock. Blessed will be your basket and your kneading trough. Blessed will you be when you come in, and blessed will you be when you go out (Deuteronomy 28:1–6).

Analysis

God promised to bring blessings on the nation in response to Israel's covenantal obedience. These blessings included wealth. Deuteronomy 28 is a recapitulation of Leviticus 26. It announces dual sanctions: blessing and cursing. The chapter begins with blessing; it ends with cursing. The section on cursing is much longer than the section on blessing. It announced a system of predictable sanctions in history: covenantal rebellion by Israel would lead to God's imposition of these sanctions. This is why this passage and Leviticus 26 are the most important in the Bible—along with Deuteronomy 8:15–18—for the development of an explicitly biblical social theory. [North, *Deuteronomy*, chaps 21, 22]

These promises related to measurable quantities—"increase," "plenteous"—of specific goods. "Increase" referred to storage implements: baskets. The numerical objectivity of these reference points is crucial for this passage. These were not exclusively inward blessings. The fulfillment of these covenantal promises, Moses told the nation, will be visible to the Israelites and also to their enemies. These blessings will serve as evidence of God's sovereignty over history through the predictability of His covenant relationships. The blessings and cursings of God under the Mosaic covenant

were sure. They were connected to God's law. This implied that there was a bedrock objectivity that united covenant-keepers and covenant-breakers. That which God regarded as a blessing, Moses told Israel, all men would regard as a blessing; the same was true of cursing.

The lists of blessings and cursings in Deuteronomy 28 were premised on an agreement among subjective evaluators. *There are therefore shared objective standards of discourse and evaluation*. This objectivity is not undermined by subjective evaluations by individuals. The subjectivism of individual perception would not overcome the objectivity of the corporate sanctions. Israel would enjoy more blessings than the surrounding nations if the people obeyed God's law. But they would be visibly, objectively cursed if they disobeyed. *The idea of national blessings and cursings rests on the existence of objective measures*. For men to make such evaluations, numerical measures must apply to the external world. To own a larger number of desirable goods is superior to owning fewer of them. However clever or arcane the methodological subjectivist may become, there is no escape from Deuteronomy 28. The objective superiority of more is assumed by God. Other things being constant, it is better to be rich and healthy than it is to be poor and sick.

This passage ratifies the legitimacy of individual comparisons of national wealth. An individual may lawfully seek out evidence of superior performance of any society. At the same time, this passage does not ratify the legitimacy of government-funded comparisons of national wealth. The collection of economic or other performance data by the government, except for military-related purposes or other aspects of law enforcement, is illegitimate. To use state coercion to fund data-gathering is a form of illicit numbering. The Mosaic law made it clear that numbering was lawful only in preparation for holy warfare, a law that David disobeyed (I Chronicles 21:1–3). It was not to be a common activity of the state.

Defenders of the central planning bureaucratic state can justify its efficiency only on the basis of its possession of more accurate and more relevant information than the private sector possesses. *Statistics becomes a necessary political justification for socialism and interventionism*. Strip the state of its access to this pretended knowledge, and you strip away its aura of omniscience. The point of Deuteronomy 28 is not that there are objective measures of economic performance that are available to state economic planners. On the contrary, the point of this passage is this: *the way to wealth,*

both individual and corporate, is through systematic adherence to biblical law. Politicians should not authorize bureaucrats to use compulsion to collect data so that other bureaucrats can devise coercive policies that supposedly will increase the nation's economic output. Instead, they are to content themselves with the enforcement of God's law in a quest for civil justice. Whenever they are successful in this limited venture, per capita wealth will increase.

The Bible relates economic growth to the fulfilment of God's dominion covenant. The metaphor of growth is basic to the biblical ideal of planting and reaping. "You will bring them and plant them on the mountain of your inheritance, the place, the Lord, that you have made to live in, the sanctuary, our Lord, that your hands have built. The Lord will reign forever and ever" (Exodus 15:17–18). The Bible describes the process of social progress in terms of the language of planting and harvesting a crop. [North, *Exodus*, ch. 17]

A. Capital and Covenant

Justice produces wealth. Any attempt to discover economic laws of wealth based on a detailed search of economic statistics reverses the Bible's concept of moral cause and economic effect. It places economic causation above moral causation in the wealth of nations.

1. Adam Smith's Ethical Legacy

Adam Smith understood this; his disciples rarely have. Before he wrote *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), he wrote *The Theory of Moral Sentiments* (1759). His moderate deism was a desiccated version of the covenantal Presbyterianism of his Scottish peers. His contractualism was a man-centered version of their covenantalism. His orderly world of economic causation rested on moral cause and effect in history. The seeming autonomy of his economic theory from morality, and of his morality from theology, is an illusion. Smith's epistemology moved in the direction of autonomy, no doubt, but his economic theory was not an exercise in value-free methodology. He recognized that an economy is grounded in moral causation, for society rests on justice. He wrote this in the *Theory of Moral Sentiments*: "Society may subsist, though not in the most comfortable state, without beneficence; but the prevalence of injustice must utterly destroy it." Social order is not the product of immoral behavior, however profitable vice may be in the short run. "Vice is always capricious—

virtue only is regular and orderly." Self-interest that is devoid of love of one's neighbor cannot build a civilization. "As to love our neighbour as we love ourselves is the great law of Christianity, so it is the great precept of nature that we love ourselves only as we love our neighbour, or, what amounts to the same thing, as our neighbour is capable of loving us." Smith did not pursue this ethical theme in *The Wealth of Nations*. The doctrine of ethics is not part of its methodological framework. His disciples have ignored his instruction on justice as systematically as Isaac Newton's disciples have ignored his view of God, creation, and providence.

Evaluating God's favor to a society by an appeal to numerical measures is valid. But this evaluation must always be governed by the economist's qualification: "other things being constant." The "other things" in this case are ethical. *Ethics comes first*. For most people, it is better for them to be middle class than wealthy. Why? Because of the ethical temptations associated with great wealth. "Put vanity and lies far away from me. Give me neither poverty nor riches, just give me the food I need. For if I have too much, I might deny you and say, 'Who is the Lord?' Or if I become poor, I might steal and profane the name of my God" (Proverbs 30:8–9). [North, *Proverbs*, ch. 85] If a person's ethical status could be ensured irrespective of wealth, then more would always be better than less. But it is inherent in the covenantal structure of a fallen world that wealth and ethics are intertwined. Smith understood this. He wrote in *The Theory of Moral Sentiments*: "The virtue of frugality lies in a middle between avarice and profusion, of which the one consists in an excess, the other in a defect, of the proper attention to the objects of self-interest." He lauded frugality in the name of capital formation, but not frugality to the point of greed. He praised spending by the wealthy as a source of benefit for workers, but not to the point of wasting one's inheritance.

Here is where biblical imputation becomes difficult. On the one hand, wealth is designed to confirm the national covenant. "But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:18). But it can just as easily undermine the covenant: "But you may say in your heart, 'My power and the might of my hand acquired all this wealth'" (Deuteronomy 8:17). The same numerical sanction—wealth—can become a means of grace or a means of wrath. *A person's covenantal status determines which effect wealth has in his life*. The trouble is,

we are not always sure about what our covenantal status is, nor are we sure what it will become under different economic conditions. This is why the author of the Proverbs prayed for middling wealth. It is safer. In genetics, this tendency is called "regression to the mean." This was discovered by Francis Galton, Darwin's cousin.

2. Regression to the Mean vs. Pareto's Law

In his book, *Against the Odds: The Remarkable Story of Risk* (1996), Peter Bernstein wrote that regression to the mean has applied to every system we have discovered. He exaggerated. There are many systems in which another phenomenon operates: Vilfredo Pareto's 20-80 law.

Pareto, an Italian sociologist-economist who taught economics in Switzerland in the late nineteenth century, made detailed investigations of the distribution of income in European nations. He discovered an amazing fact: the slope of the income curve, from the richest to the poorest members of society, was similar in every nation that he studied. The richest 20% owned most of a nation's wealth: 80%. This statistical relationship, first published in 1897, has not changed significantly over the last century, irrespective of the economic policies of individual industrial nations. This statistical relationship has come to be known as the Pareto law or the Pareto rule or the 20-80 rule. A 20-80 distribution has been found to apply in social institution after institution, as well as in their diverse operations. No one seems to know why. Josef Steindl wrote in 1965: "For a very long time, the Pareto law has lumbered the economic scene like an erratic block on the landscape; an empirical law which nobody can explain." I would like to say that I have an answer to this seemingly irreconcilable question regarding 20-80. The phenomenon exists. Why does it exist? Why doesn't regression to the mean eliminate it? I do not have an explanation. Pareto offered a famous sociological theory: circulating elites. He argued that the same families or social groups will not be found in the top 20%, generation after generation. Over long periods of time, this appears to be true, but it is not easy to prove. Statistics do not prove it in the way that they validate wealth distribution. The theory is consistent with the hierarchical aspect of the biblical covenant. Why does the distribution of income remain skewed, despite either government intervention or free market competition? We do not know.

3. Covenantal Blessings

Here is what Christians do know: *God is sovereign over the poor.* He raises them up—not all of them, but some of them. "The Lord makes some people poor and some rich. He humbles, but he also lifts up. He raises up the poor out of the dust. He lifts the needy from the ash heap to make them sit with princes and inherit the seat of honor. For the pillars of the earth are the Lord's and he has set the world upon them" (I Samuel 2:7–8). [North, *Historical Books*, ch. 12] God can intervene in history to break the cycle of poverty as surely as He breaks the cycle of wealth. But is there a cycle of poverty? Is there a cycle of wealth? Do the rich get richer and the poor get poorer, "other things remaining constant"? This is another way of asking: "Is God capricious? Does He raise up some and cast down others for no particular reason?" Deuteronomy 28 denies this. God has established a structure of economic order. First, there are not many extremely poor people in a covenant-keeping society. "I was young and now am old; I have never seen the righteous person abandoned or his children begging for bread" (Psalm 37:25). [North, *Psalms*, ch. 6] Second, there are not many rich people. Capital is hard to earn and harder to retain unless the state intervenes to protect existing holders of capital from new sources of competition. If a state does this, then its national economy eventually falls behind free market societies that refuse to grant such coercive protection to special-interest groups.

If a society is getting richer than its rivals, the poor people inside this society may become richer than the middle class are in another society. Can this lead be maintained indefinitely? To answer this question, I begin with a statistical observation: *the effects of long-term economic growth are cumulative.* A small rate of growth, if compounded, creates huge effects over centuries. A slightly higher rate of growth, if maintained, creates huge disparities of wealth between nations over centuries. But huge disparities of anything within a system call forth the counter-effects: either regression to the mean (which does not seem to govern wealth distribution) or the circulation of elites (which does seem to operate in income distribution). If innovators in one nation have a competitive lead, imitators in other nations will be tempted to imitate the success of the first nation's innovators, assuming that the sources of their advantage become known, which is almost always the case. New production techniques are difficult to conceal in a digital era. There is great personal economic incentive for outsiders to discover and appropriate these secrets.

Can God's covenantal blessings be maintained indefinitely? To answer this question, we must not appeal to the Old Covenant's category of original sin. The familiar Genesis pattern of *creation, fall, and redemption* appeared continually in the Old Covenant, but the New Covenant has broken that pattern by means of the *death, resurrection, and ascension* of Jesus Christ. The possibility of sustained confession and sustained economic growth does exist as a theoretical ideal. The history of the West after 1800 has demonstrated this possibility. Men have discovered the secrets of widespread wealth: property rights, individual freedom, enforceable contracts, future-orientation, the moral acceptance of wealth, capital accumulation, and technology. Great Britain and its North American colonies discovered these secrets first. The United States replaced Great Britain as the world's engine of growth early in the twentieth century. Parts of Asia have begun to grow rapidly at the beginning of the twenty-first.

A nation's citizens are subject to the lure of autonomy: "My power and the might of my hand acquired all this wealth." A nation can lose its position of leadership. Historically, every leading nation has. But the New Covenant has overcome original sin in a fundamental way. It has made possible the Mosaic law's ideal of long-term compound growth. It has given mankind a new eschatology, one which is no longer trapped by the cyclical history outlook of the pagan world. Linear history—creation, fall, redemption, kingdom extension, and final judgment—can be applied to nations and societies. Society is not organic. It does not parallel biology: birth, growth, decline, death. Society is covenantal: confession, obedience/disobedience, sanctions, inheritance/disinheritance.

There is no bell-shaped distribution of wealth within a society. A minority of about 20% of the population owns about 80% of the capital. But there is change in who occupies the top positions, although this may take generations. The Bible says that at one end of the income distribution curve, the rich man is tempted to forget God. If he succumbs, he loses his wealth, or his heirs forget to honor the moral basis of wealth-creation. They dissipate their inheritance. The process of inheritance rewards the righteous. At the other end of the curve, the poor man who steals is eventually caught and sold into bondage under a successful person. His victim receives payment; he receives training; his buyer receives a stream of labor services. If the servant is successful and buys his way out of bondage, he re-enters society as a disciplined man, and presumably a self-disciplined man. He accumulates wealth.

Can a family maintain its advantage? No more than a society can. Then what about society? It is possible for a covenantally faithful society to retain its advanced position until such time as: (1) it succumbs to the temptation of autonomy; (2) other nations imitate it and become even more faithful. On the one hand, sin can undermine a society by pulling it back into comparative poverty. On the other hand, the gospel can spread, bringing other nations into the growth mode. *The deciding factor here is grace, not statistics.* Nations rise and fall, or else get overtaken, but none can maintain a permanent lead apart from its continued lead in ethical sanctification.

B. Visible Success Under God's Covenant Order

The visible outcome of covenant-keeping is external blessing. This theme is basic to the Pentateuch. I argue that it is basic to the entire Bible. My argument is not taken seriously by Christian commentators and Christian social theorists. They argue that there has been a great discontinuity between the Old Covenant and the New Covenant. This discontinuity supposedly has broken the predictability of God's visible responses in history to man's obedience or disobedience. But if there has been a great discontinuity, then what has happened to the evangelism aspect of Bible-revealed law? "Look, I have taught you laws and decrees, as the Lord my God had commanded me, that you should do so in the midst of the land which you are going into in order to possess it. Therefore keep them and do them; for this is your wisdom and your understanding in the sight of the peoples who will hear about all these statutes and say, 'Surely this great nation is a wise and understanding people.' For what other great nation is there that has a god so near to them, as the Lord our God is whenever we call upon him? What other great nation is there that has laws and decrees so righteous as all this law that I am setting before you today?" (Deuteronomy 4:5–8) [North, *Deuteronomy*, ch. 8]

Moses was repeating what he had announced in Deuteronomy 6. "Now these are the commandments, statutes, and decrees that the Lord your God has commanded me to teach you, so that you might keep them in the land that you are going over the Jordan to possess; so that you might honor the Lord your God, so as to keep all his statutes and commandments that I am commanding you—you, your sons, and your sons' sons, all the days of your lives, so that your days may be prolonged. Therefore listen to them, Israel, and keep them, so that it may go well with you, so that you may greatly mul-

tiply, in a land flowing with milk and honey, as the Lord, the God of your fathers, has promised you would do" (Deuteronomy 6:1–3). This is the basis of the wealth of nations, which means increasing wealth per capita in a growing population sufficient to fill the earth to complete the dominion covenant. [North, *Deuteronomy*, ch. 14]

Has the ethical cause-and-effect social and economic system of the Mosaic law been annulled by God? Are the differences between covenant-keeping nations and covenant-breaking nations no longer visible to covenant-breakers? Has God annulled this judicial tool of evangelism in the New Covenant, an era which is generally regarded by Christians as the great era of evangelism, i.e., the Great Commission? [North, *Matthew*, ch. 48] The critics of biblical law assume that this is the case, but they rarely say so publicly. This implication of their hostility to biblical law is just too embarrassing.

Under the Mosaic covenant, covenant-breakers could see that the outcome of covenant-keeping was superior to other outcomes. This realization was designed by God to call forth the confession of Deuteronomy 4. But Christians today assume that, under the New Covenant, this older relationship between national obedience and national wealth is gone. The objective testimony that God gave to covenant-breakers through Israel under the Old Covenant supposedly no longer exists. *The arrival of the New Covenant has supposedly left modern man with less excuse.* Under the Old Covenant, foreigners and resident aliens could see that Israel's law-order was superior. Under the New Covenant, they supposedly cannot see this, because no nation possesses or can ever possess any such covenantal law-order. No such law-order exists, we are told. Here is my summary of the inescapable conclusion of such a view of God's law. "Under the Mosaic law, covenant-breakers possessed greater clarity in recognizing the external blessings of the covenant, and therefore they had greater responsibility for rejecting the covenant than they have today." This strange theory of covenantal responsibility is implicitly held by the vast majority of Christians today. We are asked to believe that the New Covenant has left covenant-breaking men with more excuse for their rebellion, because the clear covenantal categories of the Old Covenant have been superseded by a less clear covenantal order.

The antinomian critic seeks to evade this inescapable implication of his position by arguing that the Holy Spirit's presence in the New Covenant has more than offset the supposed loss of clarity regarding ethical cause and effect. The theological temptation here—one that is widely succumbed to—

is to believe that some form of *antinomian mysticism* has replaced judicial theology. An antinomian doctrine of the Holy Spirit has replaced the objective testimony taught by Deuteronomy 28. Against this view, I argue that a theory of the regressive covenants—greater personal responsibility for covenant-breakers today despite reduced objective testimony—is incorrect. Antinomian mysticism is also incorrect. There is progress in covenantal history. *Theological contrasts get clearer over time, not more muddled*. The death, resurrection, and ascension of Jesus Christ in history have made the Great Commission possible (Matthew 28:18–20). The sending of the Holy Spirit has granted to God's people greater understanding than Old Covenant saints possessed.

Christian social theory rests on a premise: the continuing authority of this announcement. "Do not forget him who led you through the great and terrifying wilderness, with its fiery serpents and scorpions and thirsty ground where there was no water, who brought you water out of the rock of flint. He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:15–18). External blessings were confirmations of God's covenantal social order. If this system of confirmation is no longer true under the New Covenant, then there cannot be any uniquely biblical Christian social theory. This includes economic theory. Christians must therefore pick and choose among non-Christian theories of social causation. There could be no Christian economics, no Christian political theory, no Christian sociology, and no Christian social theory. There can only be various kinds of baptized humanism. If you do not like this conclusion, then you will have to reconstruct Christian social theory in terms of some other principle that is revealed in the Bible. This will not be an easy task. Remember: you can't beat something with nothing.

C. Overcoming the Limits to Growth

There are limits to growth. This is another way of saying that there is scarcity. There was scarcity before the fall: finitude. The dominion covenant is God's assignment to mankind to overcome these limits progressively.

This is not a program for man's ultimate divinization. Rather, it is a call to eternal service. The dominion covenant is eternal. It is above all a call to *greater knowledge*: greater knowledge of God's creation and greater knowledge of God. God is infinite. There will always be more for men to learn. There is also cursed scarcity, which was God's response to man's rebellion (Genesis 3:17–19). [North, *Genesis*, ch. 12] Men are required to overcome this scarcity. But, the Bible teaches, it takes redemption to achieve this long term. It takes special grace.

Humanistic economic analysis usually begins with scarcity. Economists generally favor economic growth because it presses against the limits of scarcity. Economists claim to be morally neutral, but when it comes to the issue of economic growth, there is widespread agreement that this is a legitimate goal of government economic policy. Economic growth is regarded as a good thing, both morally and institutionally. On this point, Christian economic theory agrees with humanistic economic theory.

For a biblical standpoint, economic growth as a goal in and of itself is the religion of mammon: "more for me in history." It presumes that man is autonomous. Man seeks his own goals. He answers neither to God nor nature. The ecology movement is a reaction against this outlook, but it has had little impact on the thinking of most economists. The correct biblical response is this: *economic growth is a blessing in response to men's covenantal faithfulness*. This means honoring God's laws. The modern world has come closer to honoring God's economic laws than at any time in the past. Private property, future-orientation, capital accumulation, free trade, equality before the law, few or no price controls, and other aspects of biblical economics have been adopted by Western economists, Western governments, and a growing number of Western intellectuals. This outlook spread to parts of Asia after World War II. This is an aspect of common grace.

The most remarkable aspect of economic growth has been the decline in the cost of information. Nothing on this scale has happened in the history of man. The cost of information continues to fall at a rapid rate. The first major breakthrough was in 1844 with the commercial development of the telegraph. This overcame the limitation of space as never before. Continual improvements in telecommunications since 1844 have revolutionized the world. The development of punch cards in the late nineteenth century was another breakthrough: computerization. The vacuum tube increased the impact of telecommunications through radio, and it also in-

creased the speed of computer calculations in computers, beginning in 1945: Eniac. Then came the invention of the transistor in 1947, the integrated circuit computer chip in 1959, and microcomputers in the late 1970s. The World Wide Web appeared in the mid-1990s. A decade later came the smartphone. All of this has continued to lower the cost of information. The primary breakthroughs in overcoming the limits of scarcity, accelerating after 1900, have been the result of the reduction in the cost of knowledge. Here, physical limitations are far less restrictive. The major physical limitations are the speed of light and heat.

There is a debate among economists regarding the most effective government policies to achieve economic growth, but ever since the fall of the Soviet Union in 1991, Western intellectuals have favored free markets, free trade, and the right of contract. Keynesian economists believe that governments should run deficits in times of recession, and they also believe that central banks should increase the digital money supply. They believe in some degree of central planning. They do not believe that economic growth can be attained exclusively by the free market's decentralized economic planning.

The spread of free-market capitalism across the face of the earth has now begun to offer this hope: the elimination of starvation-level poverty by 2060. If someone should read this forecast in the early twenty-second century, it will seem conventional, but nothing like this was forecasted by anybody in 1975. There has been an acceleration of worldwide economic growth, and this has been accompanied by a transformation of economic thinking away from socialism.

This increase in per capita economic growth has been accomplished primarily by a reduction in the costs of production. This process began sometime around 1750, and it accelerated after 1800. This has transformed the world. Except for the decade of the 1930s, the consistent increase in per capita wealth of at least 2% per annum in the West has created a new civilization.

It would be convenient if economic historians were in agreement on exactly what it was that led to this enormous expansion of per capita wealth. But such is not the case. Prof. Deidre McCloskey has analyzed three dozen different explanations offered by economic historians, and has showed why none of them is persuasive. The title of McCloskey's book is compelling: *Bourgeois Dignity: Why Economics Can't Explain the Modern World* (2010).

McCloskey thinks the primary change was a change in rhetoric which favored entrepreneurship and wealth. We need a scholarly book to provide the historical evidence for this thesis. The third volume of McCloskey's trilogy did not succeed in proving this. It offered no evaluation of the sources of this rhetorical shift before 1700: sermons and theological treatises. In a theological era, these were the sources of rhetoric that either confirmed or changed most people's minds.

The historian always should begin with the five W's: what, where, when, who, and why? Then he must ask the sixth question: how? When did compound per capita economic growth begin? This was no later than 1800. But there had been no major change in rhetoric in the years leading up to the economic transformation. Anywhere else? One obvious candidate is the Netherlands in the late sixteenth and seventeenth centuries. Next, who were the sources of the change of rhetoric? The major sources of opinion would have been pastors. These were divided between Calvinists and Arminians. Did their sermon messages change? Did this change in outlook regarding entrepreneurship and wealth get into the theological textbooks of the era? Was there any aspect of theology that changed, thereby making a new attitude toward wealth more acceptable? There was one change: eschatology. The seventeenth century was the birth time of postmillennialism. A new optimism regarding historical progress came into being. There were postmillennial theologians in the Netherlands in this century. Did they preach such sermons relating historical optimism in entrepreneurship? We do not know. If they did preach such sermons, what effects did this have on capital creation, exploration, and business? We do not know. "Why" is easy to answer: to get rich. Then there is "how?" What did the Dutch do that made growth possible? Increased thrift? Increased innovation? All of these questions would then have to be applied to Scotland and England.

Because compound economic since 1800 has transformed the world far more than any other social force in history, I regard the question of its origin as the most important question that a historian can ask and then answer. It would certainly be nice to have a plausible answer that is not seriously undermined by the facts.

D. Rising Output, Falling Prices

Free-market capitalism has produced increasing per capita output, and therefore increased per capita income, ever since 1800. From the end

of the Napoleonic wars in 1815 until the outbreak of World War I in 1914, consumer prices in the West were either stable or falling. This was the era of the international gold coin standard. There was some monetary inflation because of fractional reserve banking in some nations, so the money supply was not stable, but it increased very little in most Western nations. The main exception was the United States during the Civil War (1861–65), which is a time of rampant monetary inflation, especially in the Confederacy.

1. Rising Output

Rising output means rising income. As income rises, people have a greater number of choices than they would have had if their income had not risen. This is the best way to define economic growth: *an increased number of choices*. Additional choices increase individual freedom. They also increase personal responsibility. This is the essence of the dominion covenant. Men are to exercise greater responsibility in the administration of the capital that God has allocated to them in their capacity as legal trustees and economic stewards.

It has been common throughout history to visualize economic growth in terms of the ownership of an increasing number of physical consumer goods. People think of greater wealth as enabling them to buy larger homes. Biblically, this goes back to King David, who built himself a palace (II Samuel 7). In modern times, most people still think of greater wealth in terms of large homes in nice neighborhoods, owning upscale cars, having nicer furniture, having the latest labor-saving devices, and so forth. People no longer think of wealth as having a large number of servants in the household. That concept of economic growth ended in the West after World War I. Today, the very rich do maintain large estates with full-time servants, but they do so invisibly. The general public does not see these estates, which are surrounded by large land holdings. Extremely wealthy people prefer anonymity except on special occasions at fund-raising charity events attended only by the very rich. This lifestyle involves separation from the general public. They share this preference with celebrities, who do not seek anonymity, but who seek separation from photographers and fans.

In the United States, wealthy people also seek invisibility. They do so by living in upscale neighborhoods, but not in the isolated enclaves of the superrich. They have no consumer debt. They do not drive the latest expensive

car. They may not own the largest home in the neighborhood. There is a phenomenon in the United States called "the millionaire next door." Their neighbors do not know anything about their net worth.

This indicates that individuals have different subjective standards of what constitutes success and therefore what constitutes a successful lifestyle. Objective wealth in the form of net monetary worth produces different subjective evaluations regarding the proper display of wealth.

Another form of wealth is leisure time. Leisure time means time that is not devoted to making money or giving it away. The problem with leisure time is this: *the richer that someone is, the more valuable is his time.* He is probably an entrepreneur. Every spare hour becomes more valuable. Relatively few rich people who are founders of great enterprises indulge in leisure. Children who inherit large fortunes are far more likely to indulge in leisure. They are not economically productive. Their income from their inheritance is so high that not working for a living does not cost them anything in forfeited lifestyle. This is why one of the richest men in the world, stock market investor Warren Buffett, once made this statement regarding his children: "I want to leave them enough money so that they can do anything, but not so much that they can do nothing." It is a wise aphorism. Nevertheless, in 2012, he gave each of his three children $600 million in shares, so he did not adhere to his aphorism. How much was $600 million? By comparison, the median family income in 2012 was about $50,000 per year. Buffett was worth over $85 billion in 2019. He still ran his company at age 88. There was still very little leisure time in his life.

Because of research by psychologists and economists in the subdiscipline known as behavioral economics, academic economists have learned of the phenomena known as the *hedonic ratchet*. As personal wealth increases, the subjective exhilaration of this new wealth lasts for a period of time, but within a year or two, the level of happiness and satisfaction with life reverts to what it had been before the individual gained this increased wealth and income. This is not true of extremely poor people who become lower-middle class. They remain much happier with their condition than they were before. Above this level, the hedonic ratchet phenomenon begins. This was not a new discovery. The book of Ecclesiastes talks about this phenomenon. Establishment economic theory has ignored this phenomenon because it has no way of accounting for taste. Subjective tastes change as people get richer, but their subjective sense of satisfaction is much less likely to change

on a permanent basis. None of this fits into the equations and graphs of establishment economic theory.

One cause of the hedonic ratchet is *the inescapable increase in personal responsibility* that accompanies an increase in wealth. This is not discussed by behavioral economists. If an individual had sought increased wealth on the assumption that he would not suffer from the burdens associated with increased responsibility, he learns that he had been incorrect after he achieves his goal. In contrast, if this person sought increased responsibility from the beginning, and his success resulted in increased wealth, then his sense of satisfaction is far more likely to become permanent. Yet, even in this case, there may be the desire to increase responsibility even more. We might call this the *responsibility ratchet*. There is no permanent sense of satisfaction. The high achiever has even more to prove. This is the curse of dominion for those who do not see themselves as stewards of God. If they see themselves as God's stewards, they should not resent increased responsibility. They should seek more responsibility only if they think they can be of greater service to God by serving men. They should see themselves as finite creatures under God. *They should understand that increased responsibility is the proper long-term goal of greater wealth*. This is made clear in the parable of the successful stewards in the Gospel of Luke. They are placed in charge of cities (Luke 19:17). Their responsibility increases dramatically. This is seen in the Bible as a blessing, not a curse.

2. Falling Prices

It is widely believed among Keynesian economists and analysts that economic growth is accompanied by rising prices. This is why Keynesians are not concerned with slowly rising prices. They think this is not only normal but normative: the inescapable cost of economic growth. The Keynesians are incorrect on all counts. Falling prices can accompany economic growth, and will accompany it in an economy in which there is monetary stability. As entrepreneurs bring an increasing number of goods and services to the marketplace, they must persuade buyers to change their spending plans. The main way that they can do this is by lowering prices. This is why consumers have rising real incomes. Their rising incomes are the result of the lower prices that they pay for the choices at their disposal. In societies in which civil governments and central banks do not expand the money supply, a falling price level is normal. This is what the United States had

from 1879, with the restoration of the gold coin standard, which had been suspended during the Civil War (1861–65), until the creation of the Federal Reserve System, which began operations in 1914. It was a time of rapidly expanding economic output, and it was also a time of falling prices for consumer goods and services.

Keynesians believe that economic growth is the result of increasing consumer demand. Keynesianism is a system of *demand-side economics*. Keynesians do not explain rising consumer demand exclusively in terms of rising productivity. They explain it also in terms of a redistribution of wealth: rising government debt (which means the removal of investment capital from the private sector, which they never mention) that funds rising government spending and therefore rising employment and consumer spending. In opposition to this outlook is free market economic theory, which is *supply-side theory*. It insists that greater productivity is attained by rising per capita investment in capital goods. This increased output enables people to increase their demand for goods and services. This outlook goes back to the economist J. B. Say in the early 1800s, whose views were anathema to Keynes. As production increases, producers lower their prices in order to extend their products' market share. This rising productivity is what creates wealth for the masses. By lowering their prices, producers seek new consumers who would not have been able to afford to purchase this new output under older conditions.

When we think of rising output in terms of falling prices, this should remind us of the curse of the ground in Genesis 3. By increasing output, men overcome the limits imposed by the curse of the ground. The thorns and weeds that God introduced as a way to make it more difficult for men to earn their daily bread are being overcome by modern technology. This is literally the case in modern agriculture, which is capital intensive and labor efficient. This is the model for economic growth in general. The curse increased the costs of production. Therefore, *overcoming the curse has to do with decreased costs of production*. These decreased costs of production lead to decreased prices of consumer goods. Competition forces producers to lower their prices. Entrepreneurs find ways of producing goods and services less expensively. This initially produces high profits. But rival entrepreneurs imitate the new production techniques, and they offer their goods and services at prices lower than the innovator offered initially. (This assumes that the innovator did not initially lower his prices in order to secure a larger

market share for his output and then keep it: Henry Ford's strategy for the Model T.) Capitalism lowers the cost of production and therefore also lowers the price of goods and services. If the money supply is not increased, the price level steadily falls.

Under a gold coin standard and free banking, where bankers could demand payment in gold from other banks, the money supply was relatively stable. Economic output increased, and prices fell.

Conclusion

The dominion covenant mandates increased productivity. It is only through increased productivity that mankind can subdue the earth. Increased productivity overcomes the scarcity imposed by finitude, and it also overcomes the scarcity imposed by the curse of the ground. This is why economic growth is not simply a benefit. It is a moral imperative. It is a covenantal imperative. This confession is basic to Christian economic theory. While humanistic economic theory does proclaim the benefits of economic growth and the legitimacy of economic growth, it does not see economic growth as a moral imperative.

There is no known limit to economic growth. But there is a temporal limit to economic growth in history. The final judgment will separate covenant-breakers from covenant-keepers. The accumulated capital, including knowledge, of covenant-breakers will then be transferred to covenant keepers, which they will use as the capital base in the post-resurrection new heaven and new earth. The wealth of the sinner is laid up for the just (Proverbs 13:22). [North, *Proverbs*, ch. 41]

Economic growth is part of God's covenantal administration. *The blessings of God are the results of obedience to the laws of God*. The enormous economic growth that has taken place since 1800 is an outcome of greater adherence to the Bible's laws of private property, future-orientation, respect for contracts, honest weights and measures, thrift, and personal responsibility.

The failure of Communist China's economy and the Soviet Union's economy stand as monuments to the failure of covenant-breaking man's attempt to substitute a rival worldview that favored the power of state central planning and the suppression of private property and free market transactions. Marx was in self-conscious rebellion against the Christianity of his youth. He substituted a religion of revolution for the religion of Christian

redemption. I wrote about this in 1968 in my book, *Marx's Religion of Revolution*. The visible, statistically measurable failure of the various Communist experiments was a major setback to the worship of the state and the state-planned economy. There never were many Marxist economists, and there are fewer today than ever. Marxism was a chaotic, illogical economic system, and almost no one takes it seriously today.

It is therefore possible to make evaluations in terms of objective economic standards. There are ways of measuring economic growth. There are also ways of measuring economic contraction. The great debate among economists today centers on which system of economic theory, which system of economic sanctions, which system of civil government will produce the greatest economic growth. *Economic growth has become the acceptable test of humanistic economic theory.* Moses proclaimed economic growth and prosperity as legitimate indicators of the reliability of the covenant that God made with Israel. Christian economic theory should adopt Moses' recommendation. Christian economic theory should examine the Mosaic law in detail in order to discover the foundations of economic theory which, when adopted by societies, will lead to permanent economic growth.

In the biblical framework, economic growth is not an end. It is a tool. Economic growth points to a temporal end of time, when the final distribution of property will take place. We read about this in the parable of the talents, which is immediately followed by a description of the final judgment. There will be winners and losers in history. This will be marked by their success in entrepreneurship in building up personal wealth. Any philosophy that denies this is inherently anti-Christian. Any economic worldview that denies this is inherently anti-Christian.

38

REGULATION

Do I not have the right to do as I want with what belongs to me? Or are you envious because I am generous? (Matthew 20:15).

If a man opens a pit, or if a man digs a pit and does not cover it, and an ox or a donkey falls into it, the owner of the pit must repay the loss. He must give money to the dead animal's owner, and the dead animal will become his (Exodus 21:33–34).

Analysis

Here we have what appears to be rival principles of ownership. The first asserts the autonomy of the property owner to whatever he wants with his property. The second places limits on his use of his property. If his property inflicts loss on someone else, the property owner is liable.

These are not rival principles. Private ownership establishes a tight legal link between ownership and responsibility, both legal and economic. The rule against an uncovered pit reinforces this strict liability. It establishes a clear guideline regarding the nature of this responsibility.

1. Ownership

The passage in Matthew is the conclusion to one of Jesus' pocketbook parables. I have discussed this version of the parable and the one in Luke in extensive detail in my commentaries. Jesus' pocketbook parables conveyed theological truths in a context that would be easily grasped by His listeners: economics. This parable dealt with the need of His followers to accept the gentile converts as equals. Despite the fact that they entered the kingdom of God late, they had equal standing. That was the meaning of equal pay for those field workers who were hired at the beginning of the work day and those who went into the field later. He ended with these words: "So the last will be first, and the first last" (v. 16). [North, *Matthew*, ch. 47]

The passage conveys a theological principle: God is legally sovereign in offering an invitation to serve Him in His kingdom. He decides what offer

to make to the workers. He owns the field. He has money to pay them. He decides the terms of exchange. The workers do not have to accept the offer, but God is in charge of the offer. It is His field. It is His business. It is His money.

The workers who were hired early complained at the end of the day: the final reckoning. They had worked all day in the blazing sun (v. 12), yet they were being paid only what late arrivals were paid. This was not fair, they implied. The owner of the field reminded them that they had agreed to the terms. He was upholding his side of the bargain, but they were demanding more money. It was his money. It was their labor. They had come to an agreement. Now they were trying to revise its terms. He replied: "Friend, I do you no wrong. Did you not agree with me for one denarius?" (v. 13) The issue was ethical: right vs. wrong. He made this clear. He was in the right. They were in the wrong.

He invoked two legal rights: the right of ownership and the right of contract. But these are really the same. *The right of ownership implies the right of disownership.* He had disowned his money. They had disowned their labor services. That is the legal foundation of every exchange. He made it plain that they were calling into question his right to negotiate an exchange. They were in the wrong. They were trying to get out of the agreement retroactively. Why didn't he have the right to pay them less than he had agreed to? Because this would have been a violation of contract. All parties to the transactions possessed legal sovereignty over their property.

Jesus was making a point about God's sovereignty in paying men for their services. On what legal basis does God possess such sovereignty? On the basis of His creation of the world. "The earth is the Lord's and the fullness thereof, the world and those who dwell therein,

for he has founded it upon the seas and established it upon the rivers" (Psalm 24:1–2). [North, *Psalms*, ch. 5] All people belong to Him, as surely as all aspects of the creation do. God possesses original ownership.

Jesus made this point by having the field owner ask the complaining field hands a pair of rhetorical questions. "Am I not allowed to do what I choose with what belongs to me? Or do you begrudge my generosity?" (Matthew 20:15). If His listeners had not understood the judicial validity of both questions, they would have been unable to draw the correct theological conclusions regarding God's sovereignty in men's election to eternal life. The field owner possessed the right to offer the early morning workers

whatever he chose. He could not lawfully force them to agree to supply labor on his terms. They possessed the right to turn down his offer. But one they agreed to his terms, he did them no wrong at the end of the day by paying them what they had agreed to.

There is no clearer statement in the Bible regarding property rights than this: "Am I not allowed to do what I choose with what belongs to me?" Property rights are human rights. There must be theologically and ethically compelling reasons for the civil government to infringe on these rights.

The foundation of private property is God's delegation of specific property to specific people and institutions. He is the original owner. He delegates property to people so that they can fulfill the terms of the dominion covenant (Genesis 1:26–28). [North, *Genesis*, chaps. 3, 4] He then holds them accountable for the administration of this property. This is the New Testament doctrine of the final judgment (Matthew 25). The warning is here.

> Then Jesus told them a parable, saying, "The field of a rich man yielded abundantly, and he reasoned with himself, saying, 'What will I do, because I do not have a place to store my crops?' He said, 'This is what I will do. I will pull down my barns and build bigger ones, and there I will store all of my grain and other goods. I will say to my soul, "Soul, you have many goods stored up for many years. Rest easy, eat, drink, be merry."' But God said to him, 'Foolish man, tonight your soul is required of you, and the things you have prepared, whose will they be?' That is what someone is like who stores up treasure for himself and is not rich toward God" (Luke 12:16–21).

This tight connection between legal ownership and personal responsibility for the administration of this property is the heart of the biblical doctrine of private property. Because God holds people legally responsible, He grants them legal sovereignty over their property.

This delegation of ownership rests on a presupposition: *the most accurate knowledge of economic cause in a person's life is possessed by this person*. This is why God holds him responsible for the administration of His property. Jesus said that an individual is responsible for his thoughts and deeds. "I say to you that in the day of judgment people will give an account for every idle word they will have said. For by your words you will be justi-

fied, and by your words you will be condemned" (Matthew 12:36–37). If this applies to careless words, how much more does it apply to men's administration of God's property! This is the message of the parable of the talents (Matthew 25:14–30).

2. Liability

We come now to this passage: "If a man opens a pit, or if a man digs a pit and does not cover it, and an ox or a donkey falls into it, the owner of the pit must repay the loss. He must give money to the dead animal's owner, and the dead animal will become his" (Exodus 21:33–34). [North, *Exodus*, ch. 41] This is one of the case laws of Exodus 21–35. These laws are clarifying cases of the general laws, known as the Ten Commandments, presented in Exodus 20. This law makes it clear than people are responsible for injuries to others caused by property they own. This passage establishes legal liability. This is the biblical judicial principle of restitution. The law went on. "When an ox gores a man or a woman to death, the ox shall be stoned, and its flesh shall not be eaten, but the owner of the ox shall not be liable. But if the ox has been accustomed to gore in the past, and its owner has been warned but has not kept it in, and it kills a man or a woman, the ox shall be stoned, and its owner also shall be put to death. If a ransom is imposed on him, then he shall give for the redemption of his life whatever is imposed on him. If it gores a man's son or daughter, he shall be dealt with according to this same rule" (Exodus 21:28–31). [North, *Exodus*, ch. 40]

The penalties here are different. In the first case, the owner of the ox gets off lightly: the loss of his ox. The ox is brought under public judgment. There is no other payment. In contrast, the penalty is far greater if the owner knew that the ox was dangerous. This knowledge increased his responsibility. He is at risk of his life or a penalty payment comparable to his execution. The threat of the negative judicial sanction encourages him to find ways to restrain the ox if he does not kill it and eat it. This is a high-risk beast. Biblical law pressures the owner to act responsibly in order to protect potential victims.

It is important to understand that this law does not authorize the creation of a mandatory program of ox inspection by state officials. God deems it sufficient that the owner is warned of the threat to him if he allows the ox to move without restraint. The owner has the responsibility of deciding which form of restraint is appropriate. If the beast kills someone, then judg-

es in a court decide retroactively what would have been appropriate. This law identifies the locations of judicial sovereignty. Before the event, it lodges with the owner. After the event, it lodges with the court. *It is a misunderstanding of biblical law to lodge this authority with a bureaucratic agency prior to the event.*

This principle of interpretation applies to another case law. "If fire breaks out and catches in thorns so that the stacked grain or the standing grain or the field is consumed, he who started the fire shall make full restitution" (Exodus 22:5–6). [North, *Exodus*, ch. 44] The person who possesses the greatest knowledge of cause and effects of fire in a field is made responsible for these effects. This person is the owner of the field. The biblical judicial principle is clear: *ownership establishes legal responsibility.* Ownership establishes lawful control over property. Control establishes legal responsibility.

A. Knowledge and Responsibility

Biblical law establishes a link between knowledge and responsibility. Knowledge of local events and local resources is overwhelmingly local. The farther away geographically that the locus of judicial authority is, the less reliable is the knowledge appropriate to the administration of property.

The Mosaic law required that the law be read every seven years in the central city.

> Moses wrote this law and gave it out to the priests, the sons of Levi, who carried the ark of the covenant of the Lord; he also gave copies of it to all the elders of Israel. Moses commanded them and said, "At the end of every seven years, at the time fixed for the cancellation of debts, during the Festival of Shelters, when all Israel has come to appear before the Lord your God in the place that he will choose for his sanctuary, you will read this law before all Israel in their hearing. Assemble the people, the men, the women, and the little ones, and your foreigner who is within your city gates, so that they may hear and learn, and so that they may honor the Lord your God and keep all the words of this law. Do this so that their children, who have not known, may hear and learn to honor the Lord your God, as long as you live in the land that you are going over the Jordan to possess" (Deuteronomy 31:9–13).

The Mosaic law provided the general principles and case law applications necessary to exercise self-government. The case laws could be read publicly before the assembled nation. There was no body of laws and enforcing rules totaling a million pages. In the United States, the national government publishes new rules issued by federal agencies that govern the application of laws passed by the government. This is the *Federal Register*. It is published daily. For decades, the annual edition totaled over 80,000 pages of three-column fine print. The pages are cumulative. They do not replace the previous year's output of rules. They add to it. This enormous volume of rules is not coordinated. It would be impossible to coordinate it. It would require omniscience. The laws on which they rest are not coordinated. Some laws total 2,000 printed pages. No politician reads even one of these laws. They are written by lawyers for the government who create these laws in the name of Congress. They are written in jargon that can be deciphered only by highly specialized lawyers.

This is why civil governments grow more invasive and less coordinated. These laws cannot be understood by the voters. They establish rules governing production and distribution. The outcomes of these laws are not known in advance. There is a phenomenon known as the law of unintended consequences. It applies to modern legislation and enforcement.

Civil governments make individuals responsible for adhering to these rules. But no one knows what these rules are. *There has been a legal separation of ownership and responsibility.* Control has steadily been transferred from property owners to distant bureaucrats. The judges who enforce these laws are not part of the judiciary. They are employed by the agencies that enforce the law. They serve as judge and jury. They are part of the executive. They are not a check on executive power. They extend executive power. This is why legal historian Harold Berman in 1983 identified the rise of administrative law in the twentieth century as a challenge to the Western legal tradition. I discuss Berman's insights in Chapter 55.

Rule-making and their enforcement are transferred to bureaucrats who have no personal stake in the outcome of their decisions. This separation creates a disruption of the prices-based production/distribution process, which is a unified process. It breaks the connection between buyers and sellers. Buyers and sellers have the best knowledge of local conditions. They also have an economic stake in the outcome of their decisions. But they do not establish the terms of exchange. Bureaucrats who cannot easily be fired

for their own bad decisions possess this authority. In the words of the title of a profound book by Nassim Taleb, to avoid economic breakdowns and crises, decision makers must have "skin in the game." This is why lenders insist on down payments and collateral from borrowers. Borrowers must face a negative outcome if they make mistakes: the forfeiture of their down payments to lenders. This is why the Bible warns us: "Be not one of those who give pledges, who put up security for debts. If you have nothing with which to pay, why should your bed be taken from under you?" (Proverbs 22:26–27). [North, *Proverbs*, ch. 69] Even worse, do not co-sign a note for another person's debt. You will have skin in the game, but without control over the use of the money. You will have responsibility without ownership. "My son, if you have put up security for your neighbor, have given your pledge for a stranger, if you are snared in the words of your mouth, caught in the words of your mouth, then do this, my son, and save yourself, for you have come into the hand of your neighbor: go, hasten, and plead urgently with your neighbor. Give your eyes no sleep and your eyelids no slumber; save yourself like a gazelle from the hand of the hunter, like a bird from the hand of the fowler" (Proverbs 6:1–6). [North, *Proverbs*, ch. 11]

Economic regulation by the state assumes that distant politicians and bureaucrats possess knowledge of economic cause and effect that no human being possesses. Committees do not possess it. There is no way that bureaucrats with neither proximity nor a personal stake in the outcome of their economic decisions can coordinate the rules that will shape the decision-making process. Whenever they attempt to do this, we lose some of our liberty. Owners do not set the terms of exchange; politicians and bureaucrats do. This is the inherent nature of all government economic regulation.

B. Complexity and Arbitrariness

The more detailed a law or a regulation, the more subject it is to arbitrary rulings by bureaucrats. The complexity comes from the attempt by the lawyers who write the laws and the regulations to specify specific applications of the law. But the greater the specificity, the greater the possibility of arbitrary interpretations. This is the result of the division of intellectual labor. The bureaucrats devote their lives to interpreting and enforcing regulations in the agency's jurisdiction. They become specialists in the past rulings of their agency. The organizations that fall under their jurisdiction must deal with a wide range of decisions, most of which are not related to

the law. Unless an organization is large enough to hire expensive legal talent who have specialized in this area of the law, they find it too expensive to defend themselves. Most organizations fall under the jurisdiction of dozens of government agencies, both national and local. The degree of knowledge required to match the specialized talent available to a tax-funded enforcing agency is high. It must be paid for.

The greater the complexity, the larger the number of precedents. The agencies are aware of these precedents. The precedents favor the agency's interpretation. This provides the agency with additional power. Under administrative law, the agencies' in-house judges make the rulings. Defendants must overcome these precedents. If they lose, the defendants must take the case into the civil courts. This costs additional time and money. Few companies can afford this expense. The agencies know this. So, they sue small, underfunded companies. The companies capitulate. Each capitulation reinforces the precedents.

The greater the complexity, the greater the likelihood that a company will violate a rule. There are limits to human knowledge. The complexity of running an organization is high. Managers make decisions constantly. There is no way that any manager can know the law if the law is 1,000 pages long. There will be constant violations. *The enforcing agency can pick and choose from among a wide range of violations.* It can harass a company constantly, bringing lawsuits against it. The costs of defense keep rising. If a company gains the animosity of a bureaucrat whose agency has jurisdiction over it, the agency has the funds to prosecute. The complexity of the law favors the government. Private firms must have profits sufficient to defend themselves in two sets of courts: administrative law courts and civil courts.

The costs of defense are great. They are also unpredictable. The costs of compliance are lower because they are more predictable. The company has an economic incentive to capitulate. The greater complexity of defense favors large, established firms that can afford legal talent. *The costs of meeting regulatory requirements fall more heavily on smaller, newer firms.* These costs serve as barriers to entry into the industry. This favors established firms that have established working relationships with the enforcing agencies. These firms face reduced competition from innovative firms that would otherwise be able to gain market share at the expense of older firms. This is why the expansion of regulation favors larger firms. They must pay more to do business, but this payment reduces competition. The enforce-

ment of the rules weighs more heavily on newer firms than older ones. In this sense, the system of regulation is arbitrary. In the early twentieth century in the United States, large firms favored the creation of national regulatory agencies. They understood that national government regulation would favor their interests.

C. Regulatory Capture

The expansion of regulation by government agencies has pressured businesses to restructure their decision-making to consider the threat of government sanctions in addition to customers' sanctions. This process is governed by the threat of negative sanctions. But also important is the promise of positive sanctions. Most regulations serve as *barriers to entry* against newer, more efficient firms that cannot afford large legal staffs. The government's creation of barriers to entry is a positive sanction, net, for established firms.

In matters of market exchange, there is always an issue of specialized knowledge. In any industry, the regulatory agencies are dependent on specialized expertise of existing firms in an industry. These firms are represented by trade associations. These associations serve as lobbying organizations. They influence politicians. They suggest additional laws. They sometimes write these laws. This influence is used to benefit established firms. These trade associations also supply regulatory agencies with specific information. They also supply suggestions. This means that the regulated companies want to gain influence inside enforcing bureaucracies.

One way for them to gain influence over politicians and regulatory agencies is to hire retired politicians and retired senior officials in the agencies. These people are paid high salaries. They know how the two systems, legislative and executive, operate. They have former colleagues who are still in office (politicians) or in senior positions inside the agencies. They can contact these former colleagues and arrange for informal meetings. For politicians, these meetings may lead to campaign contributions. For politicians, these meetings may lead to campaign contributions. For politicians and senior bureaucrats, these meetings may lead to job lucrative offers when they retire from their government jobs.

Through these lobbyists, trade associations can plead their case politically for the modification of specific laws. This sometimes happens. *But the original laws are almost never repealed*. So, the trade associations argue for

the revocation of the most burdensome regulations. They do not waste time pleading for repeal of the whole law. Their members have adjusted to the new system of sanctions. New competitors from outside the association will find that it costs them a higher percentage of their profits to comply.

Regulatory agencies are increasingly the arms of large established firms. The interests of both the regulators and the regulated industries become increasingly synchronized. This is called "agency capture." Initially, the agencies give orders to members of the industry. But, over time, the industry finds ways to resist. The connections between the industry and the regulators are strengthened by the self-interest of the regulators in securing official control. But they are also strengthened by the self-interest of the regulated firms in establishing an operational cartel. Detailed regulations accomplish this task. Wikipedia's entry on Regulatory Capture expresses this clearly.

The idea of regulatory capture has an obvious economic basis, in that vested interests in an industry have the greatest financial stake in regulatory activity and are more likely to be motivated to influence the regulatory body than dispersed individual consumers, each of whom has little particular incentive to try to influence regulators. When regulators form expert bodies to examine policy, this invariably features current or former industry members, or at the very least, individuals with contacts in the industry. Capture is also facilitated in situations where consumers or taxpayers have a poor understanding of underlying issues and businesses enjoy a knowledge advantage.

The specialization of knowledge helps to explain both the free market's process of exchange and the bureaucratic process of inhibiting free market exchange. This is a battle over authority: paying consumers' authority, which is based on their possession of money, the most marketable commodity, vs. regulatory authority, which is based on the threat of negative government sanctions and the creation of positive government sanctions.

D. The Fallacy of the Thing Not Seen

In 1850, the year of his death, Frédéric Bastiat published his long essay, "Ce qu'on voit et ce qu'on ne voit pas" (That Which We See and That Which We Do Not See). He came up with what has been called the broken window fallacy. When someone throws a stone through another person's window, the window owner must replace it. He must spend money. This creates em-

ployment. Is this a plausible justification for throwing stones through each other's windows? No, he argued. He offered an answer based on economic logic. The money that the window owner spends on installing a replacement window would have been spent on something else, either production goods or consumption goods. If we see only spending on the replacement window, we lose our understanding of economics. In 1946, Henry Hazlitt revived this long-forgotten argument and applied it to two dozen contemporary cases of government intervention. His book became a best-seller: *Economics in One Lesson*. I use a Christian version of this analytical approach in my book, *Christian Economics in One Lesson* (2nd ed., 2020).

The same argument applies to economic regulation. People see a violation of a person's property rights, either through violence or fraud. They want politicians to pass a law against this practice broadly defined. They think that politicians and bureaucrats are capable of understanding the full ramifications of this legislation. They believe that the law will reduce the extent of such practices. The problem is this: *the law of unintended consequences*, i.e., the things not seen in advance by citizens, politicians, and bureaucrats who enforce the written law by means of more regulations. One of these unintended consequences is an increase in the power of the state. The bureaucracies expand their definitions of violations of specific laws. They thereby extend their turf in the name of these laws. Politicians will copy these laws and apply them to other kinds of transactions. The precedents of regulatory laws extend outward judicially and forward through time, multiplying the number of laws and regulations.

The voters do not perceive that both their wealth and their liberty are threatened more by the expansion of the state's regulatory apparatus than by individual property-threatening acts of profit-seeking companies that have little independent power to control people's access to competing products and services. This reduces the authority of consumers. It does so in the name of protecting consumers.

Here is a thing not seen by the public. Consumers are not helpless victims of fraudulent or deceptive practices. They have ways of imposing retribution: in the civil courts, but also in the court of public opinion. When buyers impose these negative sanctions, they reinforce the free market's principle of consumers' economic authority. Sellers have economic incentives to please buyers. In a free market, sellers are not distracted by the demands of permanent regulatory agencies that operate in terms of complex

rule books. In contrast to buyers, bureaucrats do not act in terms of achieving their personal goals through owning products they intend to use. Buyers have the best knowledge of what they want. They also have the greatest responsibility. Why? Because they spend their own money. They evaluate product performance in terms of their priorities. Bureaucrats do not possess this kind of immediate, highly personal knowledge of specific individual conditions. They substitute their personal evaluations for those of buyers. They impute economic value that judicially supersedes the economic value imputed by resource owners to their own resources.

E. Licensing

Licensing is a form of government regulation that restricts the sale of goods and services to people or companies that have been formally authorized to do so by the state. Politicians pass enabling legislation. Then the government establishes regulatory agencies to administer the general restrictions established by law. There is no case law in the Mosaic law that authorizes licensing by the state. I have been unable to discover a biblical principle that would authorize licensing by the state.

The primary assumption that undergirds such legislation is this: consumers do not have sufficiently accurate information to buy a product or service without placing themselves at risk or serious disadvantage. The secondary assumption is this: the civil government can and should hire bureaucrats to enforce legislation drawn up by legislation-drafting government lawyers who act as unseen agents of politicians. These lawyers are assumed to be capable of wording legislation is such a way that (1) the courts will uphold it; (2) the language will enable bureaucrats to enforce terms of trade that will protect consumers from making mistakes so serious that their welfare might be threatened. Politicians, legislation-drafting lawyers, enforcement agency lawyers, and enforcing agents are assumed to be in possession of specialized information that will enable the enforcing bureaucrats to draw up lists of restrictions on sales that will, when enforced under threat of negative sanctions, overcome these threats to the public. Such laws are passed and enforced in the name of consumers. They are supposedly laws that consumers would authorize if they understood what is good for them. Since consumers do not and cannot understand what is good for them, agents of the state tell them what is good for them. What is good for them is this: the only sellers who will be allowed to sell

will have been screened by the enforcing agencies before they are licensed to make sales.

1. Lower Economic Growth

A major effect of this legislation is the restriction of choices available legally to consumers. This effect is not secondary. It is the primary goal of the legislation. Politicians write legislation to limit the number of sellers legally allowed to deal with consumers. The goods and services allowed to be offered for sale is determined in advance by politicians and bureaucrats. They believe that consumers must be protected from themselves by the state. Otherwise, they will be taken advantage of by sellers of substandard goods and services. In this outlook, consumers have too many choices for their own good. They will be better off with reduced options.

Analytically speaking, the best definition of economic growth is this: "more choices than before at the same price." Most people assume that they will be better off with a greater number of affordable choices. Therefore, they assume that economic growth improves their welfare. Almost all academic economists assume this. But some economists make an exception: licensing. *Licensing reduces economic growth by reducing the number of choices at the same price.* This is not how proponents of licensing publicly position licensing legislation. By positioning it in this way, the legislation would gain greater opposition. It would be seen by voters and some politicians as operating against the interests of consumers.

2. Exemptions

Licensing officially establishes bureaucratic criteria for sellers. These criteria are justified in the name of consumer welfare. Politicians who favor licensing argue that by allowing all sellers continued access to a market, sellers of substandard goods will cut their prices. This will enable these sellers to undercut established sellers. This is an accurate assessment of the effects of competition. Price competition is the primary means of competition used by newcomers to take business away from established sellers. Less important is advertising. If a seller can sell for less money, he will have more money available for advertising. The goal of both strategies is the same: to reduce sales by established sellers. This gains opposition from existing sellers. This opposition may be political.

Existing sellers understand that laws that restrict legal access to their

markets will reduce competition from newcomers. This will enable them to sell at higher prices than would otherwise prevail if the market remained open to all sellers. Existing sellers create a political pressure group to persuade politicians to pass laws restricting access. They know that new licensing laws usually exempt existing suppliers from the screening requirements. Why is this the case? Because those politicians who are willing to vote for such laws do not want to gain opposition from any existing sellers who fear being screened out of the market by the new law. If existing sellers are exempted, they may donate money to the political campaigns of those politicians who support the legislation. Politicians also understand that existing sellers will gain a competitive advantage from the legislation. It will restrict competition from sellers who have not been licensed. So, they write the laws in such a way that existing sellers are allowed to remain in the market without having to go through a formal screening process based on the legislation. Newcomers will be screened out. This offers existing sellers protection from future competition by unlicensed sellers.

3. Cartels

Legislation that restricts access to markets has a tendency to create cartels. A cartel is a group of sellers who collude with each other. They agree not to offer products or services for sale below a jointly agreed-upon price. These agreements are expensive to enforce without government intervention. Why? Because outsiders who are not parties to the agreement can enter the market and underbid members of the cartel. This puts members at a competitive disadvantage. Some of them will be tempted to match the prices of the newcomers. This will put pressure on the other members to cut prices. The cartel may break apart. Licensing provides legal barriers to entry for sellers who might underbid members of the cartel. The cartel can continue to receive higher prices while selling fewer goods. This restricts the supply of goods available to consumers.

A cartel could be defended as a resource-conservation strategy, but defenders of cartels never raise this argument. People who favor resource conservation generally oppose high profits for private firms that are cartel members. They do not make the analytical connection between cartels and resource conservation. They do not see their own logical inconsistency: favoring resource conservation but opposing cartels. Most industrial nations have laws against cartels, yet they also pass laws creating cartels.

Because licensing laws restrict legal sales and raise prices, unlicensed sellers may take advantage of opportunities to sell at a lower price. They sell in what are called black markets. These are illegal sales, but at some price, they may be profitable for buyers and sellers. The risk of participating in such markets are high for buyers and sellers. Sellers may get caught and prosecuted. Buyers find it difficult to ascertain the honesty, competence, and reliability of sellers. Information on them is not easily available. They do not openly advertise their operations.

Licensing assumes that consumers are helpless. Consumers supposedly cannot make informed judgments. The main problem with this argument is this: the consumer knows what he wants to buy. He does not want to be cheated. He has great incentive to inquire about sellers and products. With the World Wide Web, such information is readily available at a low monetary price or no price. He can conduct sophisticated searches. Sellers do not want to gain the reputation of dishonesty or incompetence. Furthermore, in some fields, insurance companies offer liability insurance to sellers. They investigate sellers' credentials and past performance. They have an incentive not to write policies on charlatans. They are at risk of making payments. This risk is personal: losses. In contrast, enforcers in government agencies are not at major risk for a bad decision, especially a decision to prohibit a transaction. They are enforcing the law. They are beyond the reach of most courts. A seller in an unregulated market can be sued. In a regulated market, it is more costly for a buyer to sue a seller. The company will claim in court that it met government licensing standards. It is therefore much more difficult to get a conviction.

F. Anti-Monopoly Laws

The word "monopoly" has no precise definition in terms of economic theory. The conditions that lead to a monopoly are imprecise, theoretically speaking. Despite this fact, monopoly has been a topic of heated debates for centuries. Critics of the private property system point to monopoly as a key ethical weakness of capitalism. A company that owns the major supply of a key resource can extract "monopoly returns" from buyers who cannot buy an equivalent product, and who are therefore compelled to pay a high price. If the seller would lower the price, more people would buy. But he finds that he can reap higher net returns by limiting production and selling this output to consumers who are willing and able to pay a higher price. The classic

example would be an oasis in a desert. The traveler who needs water can find no other source. He must pay what the owner of the oasis asks.

Other critics of capitalism—or perhaps the same ones—also argue that capitalism suffers from another moral defect. It pursues mass consumption. This consumes raw materials. They complain that capitalism does not honor the principle of conservation. But this is the opposite argument. If capitalism is morally questionable because it restricts production and therefore production because of monopoly, then why is it also morally questionable for maximizing production? Monopoly can be defended as a defense of resource conservation. Defenders rarely if ever invoke this argument, but it makes sense. Capitalism attains mass production through price competition. The way that producers find willing buyers of this increased output is by cutting costs and then cutting prices, which is the opposite pricing strategy from the one adopted by monopolists.

There is no moral violation in either case. The Christian principle of buying and selling is this: "Am I not allowed to do what I choose with what belongs to me?" (Matthew 20:15a). When you buy, you sell. When you sell, you buy. Every market exchange involves both buying and selling on the part of each party to the transaction.

When there are few sellers to compete, the seller can price his output high. He can target people with money and high demand as his customers. They want what he has to sell more than what others have to sell. They have enough money to make the purchases. It pays the seller to conserve resources by limiting production. His goal is resource conservation. He owns the resource. If he limits sales by charging a high price, he can stay in business longer. He can generate income longer.

The key analytical question is this: What prevents rival sellers from entering the market and underbidding him? Is it a geographical barrier to entry? Is it a government-imposed restriction on entry? Is the seller the beneficiary of political and bureaucratic intervention into the market? If this is the cause, then the free market is not to blame. Government intervention is. The correct way, ethically speaking, to reduce monopoly in such a case is to repeal the legislation that granted favorable treatment to the monopolist. This restores private property rights.

Certain goods are called natural monopolies. They have to do with geographical barriers to entry. Politicians create government-operated or government-regulated producers of these products. Municipal water is a famil-

iar one. So is a sewer system. Water and sewer lines must cross private property. The local government grants legal rights-of-ways to municipal monopolies. The production and distribution of electrical power is another example. It takes legal access across privately owned land to set up these systems. Until the development of cell phones, local telephone companies were granted monopoly rights for land lines. Signal distribution is still delivered in high-density regions by means of telephone land lines.

These are sometimes called natural monopolies. Every society has a few of these. The Mosaic law set up nine cities of refuge, where civil courts dispensed justice (Deuteronomy 4:41, 19:2–3, 8–9). There were roads leading to these cities. Access to the civil courts was not based on payment, either to judges or to road owners. Such roads are representative cases of legitimate violations by the state of the market's principle of high bid wins. By extrapolation we come to water and sewer systems. Only in the late nineteenth century did the issues of wire-based communications and power distribution arise. But public utilities are not judicial matters; they are economic matters. The justification of municipal public utilities is economic: more economic growth, greater wealth for almost all. The assumption is that all members of the community benefit, not just special interest groups. The vast majority of voters want these services. If the pricing of construction, delivery, and access were based on hook-up fees of users rather than taxes collected from all residents, these monopolies would be closer to the distribution principle of high bid wins. But because access to these services can be provided only by eminent domain, hook-up fees and delivery are controlled by law.

The profitability of a monopoly depends on the price sensitivity of buyers. In a needless borrowing of a term from physics, this sensitivity to prices is called elasticity. If a seller can make more net income by selling at a high price, the demand curve is said to be inelastic. First, there is no price curve. We assume that there is a series of discrete prices that buyers respond to. The lower the price, the more is demanded. Second, elasticity is a physical property. To use the word to describe people's decisions is a conceptual mistake. It is misleading.

Critics argue that more people could buy the product if the seller were not selling it so that only the better-off buyers can afford to buy. But this is true of everything that gets sold. The buyer would have preferred to pay less. The seller could have earned income by selling it at a lower price. But if the

low sales price did not generate enough sales to be profitable for the seller, he should charge more if he intends to keep producing this item. He may have been losing money on every sale. Such a pricing policy will drive the seller out of business.

There are times of crisis when buyers are at risk of losing their lives. Sellers then take on the characteristic feature of a priesthood. They are in control over life and death. Famines are examples of this situation. This is why the Bible teaches this: "People curse the man who refuses to sell grain, but good gifts crown the head of him who sells it" (Proverbs 11:26). This refers to a unique situation: famine. It is temporary. Suppliers of food cannot be found locally on short notice. But there is nothing in the Bible indicating that the state should intervene to confiscate food and ration it by non-price means. The allocation principle of high bid wins prevails in a free market. This is not a moral weakness of the system. It is a moral strength. It is a defense of private property.

G. Biblical Solutions

The biblical solution to most practical economic problems and theoretical issues is the enforcement of the Bible's laws protecting private property. When private property is enforced by civil law, church law, family law, and custom, it inescapably produces the free market economy.

Economic regulation in the Mosaic law was enforced by the courts. There were laws governing safety. The law requiring guard rails on roofs of the homes constructed after the conquest of Canaan (but not before) is an example. The Mosaic law established the house owner's legal liability for injury or death or a guest or family member who fell from an unfenced roof. "When you build a new house, then you must make a railing for your roof so that you do not bring blood on your house if anyone falls from there" (Deuteronomy 22:8). [North, *Deuteronomy*, ch. 54] The law against open pits is another (Exodus 21:33–34). [North, *Exodus*, ch. 41] These laws did not mention the creation of a bureaucracy to enforce a building code, local or national. This implies that the courts were the agencies of enforcement. These laws made it clear to property owners that they would be held legally liable. This was a negative sanction, but only if there was actual damage. These laws served as permanent guidelines to judges of the civil court. It is possible that the priesthood through the assembly could threaten expulsion for refusing to build a railing. The law is silent on this. This threat would

have been taken seriously. But this bureaucracy would not have had the authority to impose fines for a failure to obey. The sanction was all or nothing: expulsion or nothing.

These laws applied to life-and-death situations. They applied only after damage had occurred. The owners of property had to decide whether to take the risk. It was a gigantic risk. There was no insurance contract possible against the death of a human being that was the fault of the unsafe property. The Mosaic law had no other examples of economic regulation other than the general principle of honest weights and measures, which reduced fraud. These were laws against theft.

For non-life-threatening events, the Mosaic law had no prohibition against the principle of all insurance: shared risk. This is a statistical concept. Insurance contracts rely on the law of large numbers. Within any large group, the probability of a single event can sometimes be estimated in advance. Participants in a pool of insured people pay in advance to be compensated if such an event takes place. Most people are unharmed by the event. Those who are harmed receive compensation.

People want protection from harm that is caused by actions of third parties. If they are harmed, they can sue the person who caused the harm. But if the harm is minimal, it will not pay the victims to sue. This seems to benefit the person or company that caused the harm. But injured parties have ways to get even. Word of mouth and word of mouse can be effective. Another way is posting complaints in public places. The Web has made this easy. Product reviews by unhappy buyers allow them to vent their frustration. If a pattern of complaints emerges, shoppers are warned that a product or service is defective. The seller loses money. He has an incentive to fix the problem with his product. In short, the fact that buyers cannot gain restitution because their time is more valuable to them than appearing before a court does not make them impotent. It does not guarantee a seller unimpeded profits from the sale of defective products.

The free market allows independent publication to review products and services. The results can be sold to the public or in other ways monetized. Reviewers with large followings can have a positive or a negative impact on future sales and therefore profitability. Because these services make money because of their reputation for being independent, they are not receptive to bribes by offending companies. If word of bribery were to get out, these publications would lose subscribers.

Retail sellers do not want to sell products that their customers complain about. If an abnormally large number of customers bring back a product and ask for a refund, the store owner has an incentive to substitute a similar product that meets the demands of his customers. The store owner is a middleman. A middleman acts as an economic representative of his customers. He can impose a negative sanction on a wholesaler or producer: no further sales. This is a powerful incentive for change if the seller is a large purchaser of the producer's output.

All this is to say that the market process has cost-effective ways of enabling consumers to pressure sellers to improve their products. The consumer as an individual may seem powerless to gain restitution from the seller of a substandard product, but he is not powerless. If he is part of a group of disgruntled buyers, he can join with them to bring a class-action lawsuit against the producer. Even when it costs too much to organize such a joint lawsuit, the individual buyer has ways to complain in such a way that it costs the seller to continue to sell substandard products. This is the thing that is not seen by voters and politicians. What they see is what appears to be deception by a handful of sellers. They think this: "There ought to be a law!" They really mean this: "There ought to be legislation." Legislation can be seen. There is already a law: the free market's law of competition. It is this: *sellers compete against sellers.*

H. Economic Solution

Economic regulation of business by national governments began in Western Europe and North America late in the nineteenth century. This has led to an expansion of bureaucratic regulation in most areas of life. This encroachment has been steady and relentless. It has been worldwide. This is the expansion of administrative law. As Harold Berman argued in 1983, this substitution of administrative law constitutes the greatest single threat to the Western legal tradition, which relies on independent courts. He said this principle goes back to the Papal Revolution of 1076, but in fact it goes back to the Mosaic law. See the section on administrative law in Chapter 55.

The case laws of Exodus established minimal judicial principles that are consistent with the Ten Commandments. Civil courts and ecclesiastical courts were to honor these laws. Cases were brought before the courts. There was no administrative bureaucracy in the tribes that administered

any of these specialized laws. The courts established legal precedents, and these guided future courts.

Jewish law after the fall of Jerusalem honored this system. Independent courts handed down decisions, and many of these decisions were written down. These are known as *responsa*. Jewish *responsa* constitute the oldest continuous body of court decisions in history. They cover 1,700 years. There are hundreds of thousands of these in almost a thousand collections.

Administrative law is steadily replacing the Western tradition of an independent judiciary. It is also replacing trial by jury. It is removing from the citizens their most important defense against judicial tyranny. The regulatory system rests almost entirely on administrative law.

The only way to reverse this is to shrink the budgets of national governments and state governments. The vast body of legislation, which is enforced by a far more vast body of administrative rules, seems impervious to any reform. But a reduction of the budgets of the agencies would in effect reduce the burden that has been placed on businesses and individuals. It is unlikely that the public will vote for such a reduction. But if the expansion of the unfunded liabilities of governments to retired people continues at the present rate, there will come a time in which there will be political battles between retirees and executive agencies. If the retirees are successful politically, the budgets of the agencies will be cut, and possibly cut dramatically. That will constitute deliverance, although in a form which subsidizes the largest categories of welfare in the modern welfare state. To use a familiar analogy, the regulatory state suffers from the cancer of administrative law. The cancer is likely to kill the host.

Conclusion

The regulation of the economy by the government rests on a series of assumptions. The first assumption is the most crucial one: consumers do not know what is best for them. Despite the fact that they have an economic incentive to investigate the best uses of their money, they are unable without help from the government to make choices. The second assumption is that the free market's process of open competition offers too wide an array of consumer choices. Therefore, the government must restrict the number of choices available to consumers in order to make their decision-making more rational. By restricting the number of choices, according to theories of regulation, the government increases the welfare of the population. Despite

the fact that economic growth is best defined as an increasing number of choices for the same amount of money, the defenders of government regulation implicitly assume that economic growth is best defined as a decreasing number of choices for the same amount of money, as long as administrative agencies are the source of the reduction in the number of choices.

Economists have analyzed what they call the capture of the regulatory agencies by the industries that the agencies were set up to regulate. Regulatory capture is a common phenomenon. Existing trade associations work with the regulatory agencies to establish criteria for the sale of goods and services. Then, over time, these industries hire senior members of the regulatory agencies. These senior members then lobby their former colleagues in the agencies to enforce specific laws in certain ways. The ways that these laws are enforced tend to restrict entry by newer, more competitive suppliers. This creates protection for the existing suppliers.

Economically speaking, this is the cartelization of production. The government restricts entry by newer, more competitive producers. This restriction on entry maintains existing profit margins of existing members of the cartel. Regulation of the economy is invariably accompanied by the strengthening of industrial cartels. Competition is reduced, prices do not fall, and innovation does not lead to a wider number of choices. This restricts economic growth.

All of this is done in the name of protecting the consumer. Supposedly, consumers need protection from unscrupulous producers. In effect, the consumers are being protected from themselves.

39

PATENTS, COPYRIGHTS, AND TRADEMARKS

The Lord God commanded the man, saying, "From every tree in the garden you may freely eat. But from the tree of the knowledge of good and evil you may not eat, for on the day that you eat from it, you will surely die" (Genesis 2:16–17).

You must not steal from anyone (Exodus 20:15).

You must not covet your neighbor's house; you must not covet your neighbor's wife, his male servant, his female servant, his ox, his donkey, or anything that belongs to your neighbor (Exodus 20:17).

A thief must make restitution. If he has nothing, then he must be sold for his theft. If the stolen animal is found alive in his possession, whether it is an ox, a donkey, or a sheep, he must pay back double (Exodus 22:3–4).

You must not remove your neighbor's landmark that they set in place a long time ago, in your inheritance that you will inherit, in the land that Yahweh your God is giving you to possess (Deuteronomy 19:14).

Analysis

I have discussed all of these passages in my economic commentaries. There is no escape from this conclusion: privately owned property is protected by biblical law. The archetype is the judicial boundary that God placed around the forbidden tree. The tree belonged to God. Adam and Eve were not allowed to eat from it. Their violation of this boundary constituted theft. It was the original sin. It brought all mankind under God's negative sanctions.

The courts of every civil government have a responsibility to defend property rights. They must declare negative sanctions against theft. Civil

magistrates are required by God to carry out these sanctions. The legitimate sanctions are clear with respect to the theft of most property: *double restitution* (Exodus 22:4). Whatever the market price of the stolen good was at the time it was stolen, the thief must restore the property as well as pay a penalty equal to its value. This is to serve as a warning to thieves. If they are captured, tried, and convicted, they cannot escape their obligations simply by restoring the value of whatever was stolen. They must be worse off as a result of their theft. [North, *Exodus*, ch. 43]

There are two judicial aspects of privately owned property. The first is an *identifiable asset*. It has value to the owner. The tree of the knowledge of good and evil was clearly identifiable. The second aspect is a *judicial boundary* around the identifiable piece of property. God establishes this boundary: legal ownership.

In all but one property law in the Bible, the laws protecting property have to do with physical property. The exception is the third commandment. "You must not take the name of the Lord your God, in vain, for I will not hold guiltless anyone who takes my name in vain" (Exodus 20:7). [North, *Exodus*, ch. 23] This violation is a violation of identifiable property. God's name belongs to Him, and to Him alone. He establishes the proper uses of His name. *The protection given to God's name extends to the protection given to the names of His agents in history.* This is why there is a law against slander. This is the meaning of the ninth commandment: "You must not give false testimony against your neighbor" (Exodus 20:16). The neighbor's reputation is protected by God's law. [North, *Exodus*, ch. 29]

A person's name is associated with personal responsibility. A private property legal order has as its greatest benefit *the linking of ownership with economic responsibility*. Responsible people are better servants to God and men than irresponsible people are. This principle applies also to a person's general behavior. He has been given life. He has been given opportunities. He has a reputation. This reputation is assessed by others in the marketplace. His reputation must not be undermined by false accusations.

Similarly, a person is not to use another man's name on his own productivity. This law prohibits counterfeiting of all forms. He is also not to take credit for the other man's productivity. To take credit for another man's productivity is an act of theft. It is a particular form of theft: fraud. If a person takes credit for another man's productivity, the victim is entitled to double restitution. But the expense in time and legal fees of proving this in

most cases will be much greater than the potential restitution payment from the thief. This is a restraining factor on the number of cases brought before the courts. There is always a cost of receiving justice. There is forfeited time. There may be lawyers to pay. In most cases, it is not worth someone's time and money to take a case in front of the civil magistrate in the hope of gaining double restitution.

I come now to a fundamental principle of Christian economics. *The biblical state is not an agency of wealth creation. It is an agency of justice.* The only wealth redistribution by the state that is authorized by God is the imposition of penalties for theft. These penalties are not based on the wealth of the victim. They are based on the value of the stolen goods. If a relatively poor man steals something from a rich man, the poor thief owes the rich man double restitution. If he cannot pay this because he is a poor man, he is to be sold into slavery, and the money used from the sale is transferred to the victim. This reminds poor men that they should not steal from rich men. If they do, they should not steal something of high value. The greater the value of the loot, the greater the threat of the restitution penalty. I use the present tense. This law is universal. The thief who cannot pay his victim in cash must either be sold into slavery or else placed in a position of compulsory service in which part of his pay goes to his victim. This system is allowed by the United States Constitution. In the thirteenth amendment (1865), the anti-slavery amendment, we read: "Neither slavery nor involuntary servitude, **except as a punishment for crime whereof the party shall have been duly convicted**, shall exist within the United States, or any place subject to their jurisdiction." This is consistent with Exodus 21.

There is no case in the Bible of legal protection given to the discoverer of an idea. More to the point, *there is no principle of biblical law that defines or identifies an idea as private property.* Physical property is protected by law. A person's reputation is protected by law. That is to say, his name is protected. The work of his hands is protected by law. But the work of his mind is not protected by law.

To better understand the distinction between the protection of a man's name and protection of his idea, consider the sin of plagiarism. It is an act of fraud. In academic circles, it is legitimate to quote from another author. As long as the person quoting a passage acknowledges that someone else wrote it, he is entitled to quote the passage. Why? Because the person who wrote the passage gets credit for it—credit, not money. His name is pro-

tected, but his discovery or insight is not. Plagiarism usually leads to negative sanctions in a scholar's career. The easiest way to avoid the accusation of plagiarism is to acknowledge the name of the person who came up with the idea. Then there is no sin. There is surely no crime.

A. "Intellectual Property" Is a Misnomer

A discovery that has economic value in a production process is called intellectual property. The phrase "intellectual property" conveys the idea that a temporary monopoly granted by the state to the discoverer of an idea is conceptually the same as the permanent right of someone to a piece of physical property that he bought or inherited. Most of this chapter deals with the authority of the state to grant a temporary monopoly to someone who has discovered a new production process. This monopoly is called a patent. Part of this chapter deals with copyrights: a monopoly grant of a much longer duration to someone who has published a specific sequence of words or musical notes or other works of art that may generate money for their creator. I also deal briefly with a third grant of monopoly: trademarks. Their duration is permanent.

The state grants patents on this pragmatic basis: they supposedly lead to more discoveries, and more valuable discoveries, than the free market does without state intervention. Society therefore benefits from patents. Those scholars and policy-makers who support patents have an obligation to answer the following questions: (1) How can an idea's economic gains for society be accurately estimated by judges and policy-makers? (2) How can the economic losses imposed on society by the state's restriction on the market-based implementation of an idea be calculated by policy-makers? (3) What is the nature of the legal boundary that is said to surround intellectual property? (4) How can this boundary be enforced? (5) At what cost? (6) At whose expense? These questions are aspects of the main question that I raise in this chapter: "In what way is a technological idea or a sequence of words a judicially identifiable form of property that is comparable to physical property?"

Biblically speaking, in order for an asset to have the legal status of property, the person who claims ownership has to show that there are *biblical legal boundaries* around this asset. He has to be able to prove in a court of law that he is a lawful owner. What is his judicially valid evidence? Did he purchase it? Did he inherit from someone who had purchased it? Was it a

gift from someone who had purchased it? *There has to be a* ***trail of title****.* Only in extremely rare situations, when one culture is conquering another culture, is there no trail of title. In this case, the civil government of the invading culture establishes the terms of ownership, but only if it is successful in defending its claims against the opposing civil government. Ownership is established on the battlefield. This is what happened when Israel invaded Canaan. But it happened only once in the history of Israel. It was not to serve as a model for future conquest. Israel was not to become an empire. Mosaic laws restricted this.

A person who claims ownership of an idea has no trail of title. The Bible says that he got his idea from God. "Every good gift and every perfect gift is from above. It comes down from the Father of lights" (James 1:17a). God does not include a certificate of title to this form of property. It is a gift to the individual. But it is not a legal claim to control over the property of other people who also make use of this gift. Under biblical law, he can use his idea to benefit himself, but there is no enforceable legal boundary around this God-given idea. *God could have given the idea to anybody.* It is the recipient's idea to be used freely in his own circumstances, but it is also an idea that can lawfully be used by others in their circumstances if they learn about it. If he wishes to keep it a secret, he may lawfully make the attempt, but if the secret gets out, he has no legal title to defend. *Without a trail of title, there is no legally defendable ownership for an idea.* It may be a valuable asset, but it is not an asset protected by a legal boundary. Any attempt to establish a legal boundary is a violation of biblical law. This attempt should be resisted by citizens, legislatures, and courts.

A baker of bread has the biblical right to say this: "This bread is mine." On what legal basis? He has a trail of lawful title to the ingredients. At least, no one else can prove ownership with a superior claim. In contrast, he does not have the biblical right to say this: "The recipe is mine." Why not? He has no trail of title. There can be no such trail. The original claimant had none.

God did not tell Adam that he could not seek the knowledge of good and evil: ethics and judgment, points three and four of the biblical covenant. He wanted Adam to possess such knowledge, but only on God's terms. He wanted mankind to possess it, but only on God's terms. *God therefore did not claim exclusive ownership of such knowledge.* That was the serpent's misleading suggestion. But God did claim exclusive ownership of a physical tree that had a legal boundary around it. By implication, so can private own-

ers of physical property. Ideas are not physical property. Men cannot legitimately claim exclusive ownership of ideas that lead to dominion.

B. Whose Property Rights?

My discussion of patents and copyrights is lengthy. There is a reason for this. The topic has generally been ignored by economists. They shy away from it. There is no developed body of theory on these related issues. Even Ludwig von Mises tried to avoid these twin conceptual land mines. In the final section of Chapter XXIII of *Human Action*, a chapter on the data of the market, he wrote the following. "Patents and copyrights are results of the legal evolution of the last centuries. Their place in the traditional body of property rights is still controversial. People look askance at them and deem them irregular. They are considered privileges, a vestige of the rudimentary period of their evolution when legal protection was accorded to authors and investors only by virtue of an exceptional privilege granted by the authorities. They are suspect, as they are lucrative only if they make it possible to sell at monopoly prices. Moreover, the fairness of patent laws is contested on the ground that they reward only those who put the finishing touch leading to practical utilization of achievements of many predecessors. These precursors go empty-handed although their main contribution to the final result was often much more weighty than that of the patentee." As you will understand after you have read this chapter, I am among this group.

Mises then asserted this: "It is beyond the scope of catallactics [economic theory] to enter into an examination of the arguments brought forward for and against the institution of copyrights and patents. It has merely to stress the point that this is a problem of delimitation of property rights and that with the abolition of patents and copyrights authors and inventors would for the most part be producers of external economies." On the contrary, it is vital that a Christian economist examine these arguments carefully. They have to do with ownership, legal responsibility, theft, and economic growth. They are aspects of property rights. The central judicial issue is this: "Whose property rights? The patent holder or the rest of society?" The answer determines economic winners and losers. It also affects the rate of economic growth.

1. Preventing Harm

Biblical civil government has the responsibility of imposing negative

sanctions against people who commit harm. The Mosaic law included this law: "If a fire breaks out and spreads in thorns so that stacked grain, or standing grain, or a field is consumed, the one who started the fire must surely make restitution" (Exodus 22:6). [North, *Exodus*, ch. 44] This was an aspect of what we call strict legal liability. But the civil government had no authority to extract wealth from someone else to reward an inventor. There had to be a *physical loss* for restitution to be lawfully invoked by a victim: a fire or a physical injury. (There was an exception: false witness. This protected a man's name.) This is what Exodus 22 deals with: physical losses. There was restitution for physical losses; there were no subsidies to promote ideas. If someone in Mosaic Israel discovered a way of increasing agricultural output, he could not go to the state and demand that those neighbors who were copying his discovery pay him restitution. He also did not have the legal right to demand a royalty payment from neighbors who applied his discovery. He had the legal right to benefit from his discovery in his own fields, but not from his neighbor's fields.

Here is a modern example. Consider the use of honeybees in pollinating orchards. Someone hires a professional bee-pollination service to bring bees into his orchard, so that his fruit-producing business may experience greater output. But if some of the bees fly into his neighbor's orchard and perform that same biological service, the individual who hired the bee-pollination service cannot legitimately demand payment from his neighbor. The state would not intervene in order to collect such a payment. The state cannot lawfully impose a negative sanction on the beneficiary of a positive sanction that he did not agree to pay for. The neighbor did not agree to pay for the bee-pollination service. He owes his neighbor nothing.

The theology behind the biblical view of idea sharing is easy to explain. Because God can give an idea to anybody, and because this idea may enable others to subdue their allotted share of the earth, there should be no legal restraint on the spread of this information. The state's God-given role is to impose negative sanctions on people who have inflicted harm on others: restitution to victims. Its role is not to impose negative sanctions on those who have gained measurable benefits from ideas developed by others. *No state-enforced payment is owed to someone who has discovered a beneficial service for humanity.* The discoverer cannot lawfully call on the state to restrict the spread of the benefits that have resulted from his idea. He is allowed to benefit personally in his own business from his discovery, but he is

not entitled to benefit personally in the businesses owned by others who have benefitted from his discovery. *He does not have a property right in the use of their property.*

Patents and copyrights are violations of this principle of biblical law. The state threatens violence against anyone who adopts a recently discovered production technique if the discoverer complains to the courts. No one can legally implement this productive process without his permission. In short, the state denies their property rights: the use of their land, labor, and capital. It acts on behalf of someone who should not have any legal claim. *There is no biblical basis for a legal claim on an idea*. In the name of defending the income of someone who had no property right to an idea until the state granted him a temporary monopoly, the state restricts the property rights of an entire society: producers and the consumers who would have bought from them.

Where did such a concept of property rights come from? With only a few exceptions in history, East or West, until the Renaissance city-state of Venice in the mid-1400s, no state's legal code authorized such an invasion of property rights.

2. Economic Growth Without Patents

In the fall of 1964, I audited a course in medieval history at UCLA. It was taught by Lynn White, Jr. His book, *Medieval Technology and Social Change* (1962), was of interest to me. It was an important book in 1962 because it told a different story from what had been the common message of humanist historians ever since the Renaissance. It showed that the medieval era in Western Europe was a time of tremendous invention and discovery. The book is still quoted as a reliable study. Few academic books that old survive with their reputations intact.

There was no intellectually or legally developed concept of intellectual property in medieval Europe. Innovations were imitated whenever they proved to be productive. Some of the greatest innovators in farming were monks. Medieval monasteries were filled with men who were highly disciplined. They worked long hours. Any profits made by the monastery from the sale of its output were used either for charity or for capital development. There were exceptions, of course. Some of the monasteries became rich. Then there would be a period of monastic reform imposed by the church. But there is no question historically that the monasteries pioneered agricultural

techniques that increased food production. The monks were happy to share their knowledge with members of other monasteries, or at least those in the same religious orders. An innovation developed in one monastery spread across Western Europe. Other monasteries were what is known today as early adopters. Travelers from other monasteries could come from across Western Europe to visit a monastery that had made a discovery. They could see the results of a specific innovation. They could then take their stories home with them. Local people in their communities could then begin to experiment on a small scale to see what the results were of an innovation.

The same transmission of information took place when a discovery was made on a fief. If a lord's serf made a discovery, the lord could lawfully keep it for himself and his domain, but word of profitable innovations always gets out. Travel was circumscribed in the medieval era, but it did take place. Also, there was a common language of scholarship that unified all of Western Europe: Latin. An investigator who made a discovery could transmit this information to other scientists by letter. There was continual scientific discovery during the Middle Ages. There was a systematic development of theoretical physics. This was not known until it was discovered by Pierre Duhem. It was not known by historians until the mostly posthumous publication of his ten-volume work, *Le Système du Monde* (1913–1959). He died in 1916. The first five volumes appeared in 1913, 1914, 1915, 1916, and 1917. Humanists in France's academic guild kept the next five volumes from being published until 1954. It took his daughter's threat of a lawsuit against his publisher to get the long-suppressed manuscripts into print. This is one of the most flagrant cases of academic suppression in history.

There were a few patents in medieval Europe: in the early 1330s in England. The king issued them. But in the rest of Europe, there was no way legally for an inventor to keep another inventor from making use of his idea. There was no presumption that the civil government had any authority to restrict the spread of technological innovation except with respect to weapons. This was a liberating factor in the development of technology in Europe that continued for a millennium. The Renaissance state reversed this tradition.

The common assumption by Medieval Christian ethicists was that God could reveal to anyone important information about the operations of the world of nature. No one had the right to prevent others from putting this information to profitable use. Someone had the legal right to conceal a dis-

covery if he wanted to, but he had no right to call on the state to suppress the spread of his idea, once others observed the results of his discovery and imitated the procedures he had used to attain benefits.

C. Patents

Specialized producers in the ancient world attempted to keep secret their production methods. This was especially true of smelters. They were a guild. This was also true of healers. The original Hippocratic oath began with a promise to maintain trade secrets. Professional healers did not want outsiders to gain knowledge that would enable them to heal more people. It was not in the guild members' economic self-interest to have other healers reduce the number of sick and injured people. Here are the opening words of the Hippocratic oath. "I swear by Apollo the physician, and Asclepius, and Hygieia and Panacea and all the gods and goddesses as my witnesses, that, according to my ability and judgement, I will keep this Oath and this contract: To hold him who taught me this art equally dear to me as my parents, to be a partner in life with him, and to fulfill his needs when required; to look upon his offspring as equals to my own siblings, and to teach them this art, if they shall wish to learn it, without fee or contract; and that by the set rules, lectures, and every other mode of instruction, I will impart a knowledge of the art to my own sons, and those of my teachers, and to students bound by this contract and having sworn this Oath to the law of medicine, but to no others." This oath goes back approximately to 400 B.C. There is no record of any Greek city-state that enforced this oath in its courts. The oath was policed by the guild's members. We do not know what negative sanctions were applied to oath-breakers, or how they were applied. We do know that no Greek city-state enforced this oath.

There is some evidence that one Greek city-state did issue patents for minor discoveries, such as food recipes. This was Sybaris, which was in Sicily. The patents lasted for one year.

During the Renaissance, the Italian city state of Venice began issuing patents, beginning in 1450. These patents protected producers for a period of ten years. A century later, the king of France began issuing patents. Patents also became common in England at this time. The king issued patents as a way to establish monopolies for men favored by the crown, or for people who paid to get a patent issued. It was a fund-raising device for the crown. This was the origin of the modern nation-state.

In 1624, England's Parliament passed the Statute of Monopolies. This was the first statutory law governing the creation of monopolies. It was an assertion of power against King James I. There is no question that Parliament understood patent law as a means of creating monopolies. The state was the source of these monopoly privileges. The benefits obtained by these patents came as a result of a deliberate policy by the state to redistribute wealth away from consumers and into the bank accounts of the producers. The producers used these grants of monopoly privilege to keep prices high. They could keep out competitors who would offer identical or improved goods at lower prices.

1. Monopoly vs. Innovation

A standard argument used in defense of patents is this one: the existence of patent protection is an incentive for inventors to come up with new inventions that will benefit the public. In other words, the existence of a monopoly grant from the state is the basis of innovation, wealth creation, and consumer benefits.

In cases except patents, public utilities, and central banks, economists regard monopolies as an infringement on consumer authority. Economists correctly argue that monopolies reduce consumer authority by reducing competition. Almost all economists argue that monopolies are negative factors in wealth creation. There are some economists, probably most economists, who argue that there should be statutes prohibiting monopolies. They do not acknowledge that in almost all known cases, *the origin of monopoly is some form of state interference into the market process*. There is therefore no economic necessity for the state to pursue a monopoly in court. Politicians need only to revoke the law that has created the monopoly. This was the insight of Murray Rothbard in the early 1960s. It was not shared by most economists. One of the few exceptions was a book written by Dominic Armentano in 1972. It opposed antitrust laws. Armentano was a follower of Rothbard. More economists have adopted Rothbard's argument over the years, but it is still a minority view. There has been no systematic attack by economists on government laws against monopoly. The economists' acceptance and even support of patent laws are inconsistent with their analyses of all other forms of monopoly, with the main exception of banking.

The simplest economic argument against patent laws is the argument offered by Frédéric Bastiat in 1850, which is known as *the fallacy of the thing*

not seen. We see the benefits of government spending on a public works project. We do not see the benefits of all of the smaller projects that would otherwise have been launched by entrepreneurs to serve consumers if consumers had not been taxed to pay for the state's public works project. Bastiat's approach to understanding public works projects was ignored by economists for almost a century. Henry Hazlitt resurrected it in his 1946 book, *Economics in One Lesson*. I used it in my 2015 book, *Christian Economics in One Lesson*.

Here is my application of Bastiat's point. By subsidizing one company by means of a monopoly created by a patent, the government restricts the widespread production of products that would have been developments of the patented idea. *Consumers are not able to buy whatever is not produced*. We do not see these missing products. We should nevertheless consider them in our economic analysis. The state is not a creator of wealth. With respect to patents, it is a destroyer of wealth. It is a destroyer of wealth that is unseen.

In a series of articles and a book written by a pair of economists who oppose patents, Michele Boldrin and David Levine, we learn the following. Beginning with James Watt's innovation of existing steam engine technology in 1768, the British government's granting of patents to him restricted innovation rather than encouraged it. Watt was able to secure a patent that was renewed, totaling 32 years. It did not expire until 1800. Almost immediately after it expired, a series of major economic innovations utilizing steam power were invented. These included the locomotive in 1803 and the steamship in 1807. For over three decades, Watt had prospered from royalty payments based on his steam engine. He made no further innovations. The great benefits of his invention would have been available to the public three decades earlier, had it not been for a pair of monopoly grants of privilege to him. The authors go on to show that this pattern has repeated itself again and again, right up to 2010. The major profits from an invention come in the first few years of the innovation. Only when a product or an industry has moved into a phase in which it is no longer innovative do the companies begin to file lawsuits against patent violators.

People make an assumption: the state can create wealth by granting patent monopolies. There is no proof of this assumption. There is evidence against it.

2. My Gain Is Not Your Loss

If I steal physical property from you, my gain is your loss of something you legally owned. I have redistributed your property without your permission. You are God's economic agent. Your property is God's property. This is why God prohibits theft. This theory of ownership rests on morality. All economic theory rests on morality.

If you come up with a good idea, and you share that idea with me, you still retain full use of your idea. You have not suffered a loss. I have not redistributed your property. But I gain the use of your idea. That idea serves as capital for me. I will use it to increase my production. I will be better able to serve customers. I have benefitted from your willingness to share that idea with me. So have my customers. Perhaps I paid you to share this idea. This was the situation in ancient Greece when someone paid a physician to share ideas with him regarding healing.

If I choose to share that idea with somebody else, that person owes you nothing. He has no legal relationship with you. There was no contract between you and him. If I swore that I would not share your idea, as was the case in ancient Greece's guild of healers, then your claim is against me for having shared your idea, but you have no legal claim against the person with whom I shared your idea. If the other person wishes to sell your idea, that is his decision. Unless you have been granted a monopoly by the state, you have no legal claim against him. The state has created a property right that the free market did not create or acknowledge. This property right did not exist in most societies until fourteenth-century England, and then only sporadically in the West for centuries.

In order to enforce your claim against me, you have to sue me in a civil court. That is expensive. It eats up court resources, which are not free. Access is limited. It is allocated by forcing plaintiffs to stand in line. You must wait your turn. Also, you will have to hire an expensive lawyer. I will also hire a lawyer. We will both spend a great deal of money on lawyers. You will not risk this for a minor idea. You will simply let it go. Or, more likely, you will not share it in the first place. You will profit from it as a legitimate monopolist who has not gained his monopoly from a grant of privilege by the state.

A common phrase for such a chain of events is this: *the genie is out of the bottle*. It is difficult to keep secrets. Once the secret is out, it will spread

rapidly if it is profitable. The person who invented the process can still legally sell his output at a profit, but his profit will be not be based on monopoly returns. It will not be based on the use of the coercive power of the state to prevent other producers from meeting consumer demand at prices consumers are willing and able to pay. The consumers are clearly the beneficiaries. This is consistent with economic analysis of monopolies. *Monopolies reduce the benefits available to consumers.*

Somebody who has an intellectual secret is like a person who has a hidden treasure. It is under lock and key. It is his responsibility to keep others away from his treasure. There are a few companies that have done this for centuries. Perhaps the longest and most successful monopoly has been enjoyed by the Zildjian company. It manufactures cymbals. It dominates the world market. Only two people know the secret of the metal's formula: the existing head of the company and his eldest son. This has been going on since 1623. It began in Armenia. The company relocated to America in 1929. Next, the most famous monopoly in America is Coca-Cola. Its formula is a closely held secret. It was invented in 1886. There are also companies that use price competition to maintain their control of an entire market. The only brand of baking soda that Americans know is Arm and Hammer. It probably controls 95% of the American market. It is highly price competitive, so it does not pay competitors to enter the market to try to take away any of its market share. None of these firms was ever granted a patent.

3. Arbitrary Term Limits

Policy-makers in the United States have assumed that a 20-year patent creates wealth. But there was a time when this was 14 years: before May 13, 2015. Why the change? It is not surprising that companies that have obtained patents then have a lot of money to spend on lobbyists who persuade politicians to extend the terms of the patents.

In order for anything remotely resembling a plausible argument in favor of the ability of patents to create wealth for the entire nation, and not just for benefitted companies, there has to be some theory of economics that identifies the proper length of the patent monopoly. There is no such body of economic literature.

According to humanistic economic theory, there cannot be such an estimate, scientifically speaking. This is because it is impossible for policy-

makers to estimate the subjective utilities of many different people. Why not? Because there is no common objective scale of value. Policy-makers would have to estimate the net subjective utilities of all the consumers who would have bought a particular product or service at a lower price, but who are not permitted to do so for 20 years because a patent protects the original company from competition. Economists also should be able to show how policy-makers can estimate the net benefits to society of inventions that would not otherwise have been invented, had there not been patent protection offered by the government. The existence of the patent system subsidizes research and development programs for products that can legally be patented. For example, pharmaceutical companies do not invest research money on medicines that could be made solely with products available in nature. Because they cannot patent products that are available in nature, they do not make such investments in such medical research.

There is no developed economic theory of the costs and benefits of patents. There never has been. The entire system of patents is simply assumed to be a net benefit to society, and this assumption is widely shared. But there is no empirical evidence that proves it, and there is no theory that proves it. In contrast, there is a plausible theory that disproves it. I shall now present it.

4. Enforcement

In order to secure a patent, a person must apply for it. He has to pay money to get it considered. He will need a lawyer to do this. Then he must wait years for the granting of the patent. His future monopoly rests on the decision of one or more bureaucrats in a government office. The government is therefore the adjudicator initially with respect to who gets a patent and who does not.

Once granted, if the patent application reveals all of the manufacturing details, it can be copied by any large company anywhere in the world. The company can begin to produce the item. To get the company to stop, the person who owns the patent must hire lawyers. The larger and richer the violating company, the more likely that the patent holder will not be able to collect a judgment against that company.

The stealing company may be able to delay the trial long enough so that the primary benefit of the patent is gone. *Most of the money made from a new invention is made by early positioning.* The public associates the name of the producer with the benefit associated with the invention. The

company establishes its market, and then it attempts to keep that market through innovation. This is why there is no guarantee that a person laboring in obscurity without a lot of money will ever be able to profit from his invention except through developing a local market, irrespective of any patent. The major patent battles are fought by large companies against each other. The common man is economically incapable of defending his patent. The only way that he can profit from it is by selling it to a large company that has enough money to defend the patent in court against other large companies.

It is not surprising that patents are granted on the basis of schematics that are not complete. Companies submitting patents requests do not submit complete schematics. They do not wish to see their inventions stolen by a company that is known to have lots of money to pay lawyers.

Companies that develop a new invention then face the potential of constant litigation from other companies that claim patent infringement, even when there was none. This restricts productivity.

Another strategy of companies is to look at a new patent and figure out ways that the patent can be developed in the future to reach a larger market. The company then pays its engineers to develop techniques to head off such developments. The company then submits patents on these potential developments, which the first company has not foreseen. This keeps the original company from developing new applications without paying royalties to the patent-submitting company.

I now come to what I think is the crucial economic factor. *Patents on anything related to information are going to prove decreasingly valuable.* This includes software of all kinds. It includes applications of important ideas. The big money is in the ideas, not the manufacturing. As manufacturing becomes more decentralized because of the development of 3-D printing technologies, it will become possible for small-scale local producers anywhere in the world to produce all kinds of items in small workshops. It will prove economically impossible for a patent holder to sue all of the companies that will put their ideas to productive uses on the small-scale basis. Patents will be enforceable in large-scale manufacturing processes, but these will be a decreasing share of the market. *High-value innovation is associated with ideas, not physical production.* Ideas can be transferred free of charge across the invisible boundaries known as national borders. The Internet recognizes no borders. This is why the market value of ideas pro-

tected by patent laws is going to fall. People will be able to appropriate these ideas and implement them around the world in small scale production. The output will be sold mainly to residents in local communities. The output may be sold through retailers in nations that do not bother to enforce the laws associated with intellectual property. This is the case of China today. There is not much that politicians in countries that enforce these laws more aggressively can do about what goes on in China. They can give speeches. Speeches do not change the legal standards in China.

If one nation, however small, decides not to cooperate with the World Trade Organization, and it allows profit-seeking companies or patent hijackers to publish full schematics on websites registered in the country and hosted on computers in the country, there is virtually nothing that a patent holder will be able to do to prevent the schematics from being downloaded anywhere in the world. If the schematics can be used for 3-D printing-based manufacturing, consumers will be able to buy the products locally that rely on the original patent. This is the wave of the future in manufacturing. It will surely be the case if nanotechnology ever becomes viable commercially.

Open source patents are becoming increasingly competitive. These are patents released into the public domain under the creative commons licensing. Anybody can use them without the payment of a royalty. This is an international phenomenon. The most obvious product is the Android smart phone technology promoted by Google. The Android operating system is used by 75% of the smart phones in the world. Outside of the United States, Android has an even greater market share. Apple's proprietary operating system controls 23%.

I am arguing that international economic development, especially development related to reducing the cost of communication, is moving the world in the direction of the original biblical model in which there is no such thing as intellectual property. As decentralization increases, and as customized production by means of small-scale manufacturing that is based on 3-D printing technologies increases, the cost of enforcing patents will rise in relationship to the benefits of securing a court injunction against a particular firm's manufacturing process.

This is already happening in the field of music. But music is not an aspect of patents. It is an aspect of copyrights. I therefore turn to the issue of copyrights.

D. Copyrights

Copyright monopolies came in Great Britain about the same time that patent monopolies became a source of income for the crown. They did not come for economic reasons, however. They came for political reasons. Queen Elizabeth I wanted to restrict publication of what she regarded as seditious literature. The nation-state of Great Britain was coming into existence, and it needed protection against ideas hostile to the creation of this nation-state.

1. Enforcement

A guild of publishers was established by self-interested businessmen in 1403: the Worshipful Company of Stationers. In 1557, under Queen Mary, the guild was granted a charter. Her government granted the Stationers a monopoly over publishing that held until the Copyright Act of 1710. They policed the publication of most printed books. This was not a total monopoly. There was another monopoly: the King's ownership of the Authorized Bible of 1611. He granted it to the royal printer, but also shared it with Oxford University and Cambridge University. That monopoly prevailed in English-speaking North America until the American Revolution. No other Bible was allowed to be published in North America. There was only one exception: a translation of the Bible into the Algonquin language in 1663. This copyright restriction ended in 1782: Robert Aitken's edition of the Bible. Legally, the king and the colonies were still at war. This was settled by treaty in 1783. In Great Britain, production of the King James Bible is still under copyright, as is the Book of Common Prayer. This is enforced under royal authority.

The heart of copyright law was described well by John Perry Barlow in 1994. He had been a songwriter for the rock group, the Grateful Dead. The Grateful Dead had a policy of allowing people to record their concerts on tape. This was a marketing decision. Fans circulated copies. Then they bought records and later CDs. This policy produced one of the most profitable bands in history. Barlow was also a founding member of the Electronic Frontier Foundation, a libertarian group promoting Internet freedom. In March 1994, his article on copyright, "The Economy of Ideas," appeared in *Wired* magazine, which was the most important English-language publication devoted to the digital revolution. This was less than a year after the introduction of the

Mosaic Web browser, and nine months before the Netscape Navigator browser, which transformed the Internet into a mass phenomenon.

Barlow quoted Thomas Jefferson to begin his article. This quote deserves reprinting.

> If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of everyone, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density at any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation. Inventions then cannot, in nature, be a subject of property.

Barlow offered this profound insight into the nature of copyright. "Copyright worked well because, Gutenberg notwithstanding, it was hard to make a book. Furthermore, books froze their contents into a condition which was as challenging to alter as it was to reproduce. Counterfeiting and distributing counterfeit volumes were obvious and visible activities—it was easy enough to catch somebody in the act. Finally, unlike unbounded words or images, books had material surfaces to which one could attach copyright notices, publisher's marques, and price tags." *Copyright laws have been enforceable mainly because of physical monitoring of printers.* Enforcement was economically feasible only because printing had to be done by a conspicuous process: consuming paper and ink. "Thus, the rights of invention and authorship adhered to activities in the physical world. One didn't get paid for ideas, but for the ability to deliver them into reality. For all practical purposes, the value was in the conveyance and not in the thought conveyed."

He then offered a brilliant analogy. He compared an idea with wine. Wine must be delivered in a container in order to be marketable. The authorities can monitor the container. He said that *copyright law applied to the bottle, not the wine*: "the bottle was protected, not the wine." This delivery system was about to end. "Now, as information enters cyberspace, the native home of Mind, these bottles are vanishing. With the advent of digitization, it is now possible to replace all previous information storage forms with one metabottle: complex and highly liquid patterns of ones and zeros."

He understood the implications of the Internet. He also understood just how fast it would spread across the globe. "While the Internet may never include every CPU on the planet, it is more than doubling every year and can be expected to become the principal medium of information conveyance, and perhaps eventually, the only one. Once that has happened, all the goods of the Information Age—all of the expressions once contained in books or film strips or newsletters—will exist either as pure thought or something very much like thought: voltage conditions darting around the Net at the speed of light, in conditions that one might behold in effect, as glowing pixels or transmitted sounds, but never touch or claim to 'own' in the old sense of the word." The bottles would soon be replaced. The wine would soon flow across borders. "Additionally complicating the matter is the fact that along with the disappearance of the physical bottles in which intellectual property protection has resided, digital technology is also erasing the legal jurisdictions of the physical world and replacing them with the unbounded and perhaps permanently lawless waves of cyberspace." This has happened as he foresaw. The process is accelerating. It cannot be turned back. Copyright laws cannot reverse it.

2. A Handful of Beneficiaries

The percentage of people who can earn a living based on the sale of their books has always been tiny. The number of people who get rich off of book royalties is extremely small. The revenues of the publishing industry have always been based on this tiny handful of individuals whose books generate sufficient income to sustain the entire industry's attempts to make a net profit. The overwhelming majority of books that have ever been printed have gone out of print after one edition. Today, the Internet enables readers to locate a growing number of these long-forgotten books. They are

available online for free. Copyright laws no longer protect them. Most of them will remain unread, for good reason. Most of the music ever written will remain unheard, as always. Most music ever recorded will remain unheard, as always.

The book publishing industry and the music industry have been transformed by digital communications. The music industry refers to this as piracy. It has been unable to stop the spread of copies of digital music. Millions of songs have been uploaded onto YouTube. There are websites on which people can download music files for free. Because some listeners wish to save time and trouble, they buy digital music at low prices online. This has enabled the music industry to recapture some of its forfeited income, but not all of it.

Traditional book publishing is centralized. It relies on marketing. It must get books into large bookstores. Only about 1% of all printed books get into these stores. Old book titles take up most of the shelf space. Few new book titles make it onto the shelves. To persuade a publisher to sign a contract, the prospective author must have a book agent who works on commission. Agents are difficult to persuade.

Book publishing has now been decentralized. Books can be published inexpensively by anybody who submits a PDF of the typeset book. The computerized system receives an online order for one copy of a book. It prints the book, prints the cover, binds the book, puts it into a cardboard mailing box, puts postage on the box, and mails it. The software sends the author a royalty as large as a conventional publisher would, and maybe more. The trick is to get that online order. The most common way is to sell through Amazon. Millions of hopeful writers are finding today what writers have always found: *most people will not purchase their books*. Writers have their books and articles copyrighted automatically in the United States as soon as they publish them online, but this does not matter economically. Almost nobody buys their books or steals their books. But at least their books are available for search engines to discover. The digital wine trickles out to consumers.

The same economic restraints apply to the enforcement of copyrights that apply to patents. *The cost of enforcing a copyright is extremely high*. Only best-selling books are worth defending. There is something else to consider. There are still best-selling books that make fortunes for authors, but Amazon's secondary market for used books is such that people can find

good copies of most used books for a fraction of the original publication price. The publishers receive no income from these sales, and the authors receive no royalties. This holds down the price of printed books.

Today, the copyright system protects a tiny handful of authors who get rich from royalties. As the copyright enforcement system fades, there will be fewer of these rich authors, but there will be readers of millions of articles and books whose authors would never have reached their targeted audience in the pre-Internet era. A few journals and news outlets will be able to profit by restricting readership to paid subscribers, but the great masses of Internet readers will not pay these fees. They will spend their time reading free materials that are offered by authors who wish to share their ideas with as many people as possible. The authors who produce the ideas that reach these people will shape the future. The authors who cling to copyright protection will not. *In the trade-off between time and money, time is winning.* As music files and reading materials become ever-cheaper, the value of readers' available time will rise.

Amazon is replacing traditional book publishers. Authors receive royalties from Amazon. Amazon honors copyright laws. But it would pay its authors even without copyright laws. Payments lure authors into Amazon's book-distribution program. Amazon pays far higher royalties than traditional book publishers pay. For electronic books within a price range, the royalties are 70%, not 10% or 15%, which traditional publishers pay on sales of printed books. Outside this price range, Amazon pays 30%. What I write about Amazon applies in China to Alibaba. Copyright laws are becoming economically obsolete for book production.

I end with a rhetorical observation by law professor Butler Schaffer. He wrote the following in his mini-book, *A Libertarian Critique of Intellectual Property* (2013): "I am unaware of any copyrights having been issued to writers such as Aeschylus, Homer, Shakespeare, Dante, or Milton; or composers such as Beethoven, Bach, Mozart, Wagner, or Tchaikovsky; or artists such as Van Gogh, Michelangelo, da Vinci, Rembrandt, or Renoir" (p. 27). A PDF of the book is available free of charge on the Mises Institute. All of the Mises Institute's books are available in PDF format free of charge. This policy has been instrumental in the highly successful publication program of the Mises Institute. The demand for its printed books is directly related to the interest created by the PDF's.

3. The Movie Industry

The main industry that will be seriously threatened by the erosion of copyright laws is the movie industry. This is a great irony. The industry is associated with Hollywood. The men who made the movie industry moved to Hollywood before World War I because it was across the country from New Jersey. New Jersey was the headquarters of Thomas Edison, whose company held the patents to movie cameras. The innovators who fled to Hollywood did not want to pay the royalties that Edison was demanding.

It is not clear how the movie industry would survive if there were no copyright protection. It costs a great deal of money to produce a movie. If Web-based distributors put these movies online for free within a few days of their release, the producers would lose their investments. Hollywood's demise would be a small price for society to pay for the abolition of copyright. It would help slow down the moral erosion of the West. What I write here about movies would also apply to cable television, other than live sports events that do not rely on income from licensing re-runs.

As the costs of computerization fall, it will be possible for creative people anywhere in the world to produce low-budget movies with skilled but unknown voice-over specialists. Creativity is the great barrier to entry. As the cost of movie production falls the value of creativity will rise. The power of the narrative will drive the movie industry, just as the power of plot lines drives fiction book publishing. Creative people want to create. They do not create because they want to get rich. The demise of copyright will see to it that they will not get rich. But consumers will be richer as a result. The consumers will have greater choices as a result. Remove state-created monopoly, and consumers benefit.

E. Trademarks

Trademarks are justified on the basis of the third commandment: God's protection of His own name. He named Adam. Adam named Eve. They name their children. *The process of naming is judicial. It establishes legal responsibility.* When people come to adulthood, their lives are associated legally and historically with their names. This extension of personal responsibility to every individual by means of his name is basic to civilization. There is no civilization without naming.

When an adult signs his name on a document, it is a legal document. Unless he has signed over the power of attorney to someone else, nobody

can put his name on the document. It would not be legally binding. All of history is a development of an association between each individual's name and life. This is why covenant-keepers' names are in the Book of Life.

This is a theological and judicial basis of trademarks. When someone puts his name on a product, buyers can identify who is responsible for this product. *This lowers the cost of tracing responsibility back to the producer.* This is a judicial issue. Therefore, trademarks should be issued on a permanent basis. No one should be allowed to counterfeit someone else's trademark. This would break the trail of ownership. Brand-name products are an extension of the name of the individual or the company that has produced and sold the products. There is no escape from personal responsibility. An individual who claims to be another individual has violated the law. This is a matter of fraud. Fraud is a violation of property rights. Specifically, it is a violation of another person's name and reputation. It is a way to deceive consumers. It is therefore illegal.

The market value of a popular brand is high. It is legitimate for a company to defend its brand name from counterfeiters. The counterfeiters are stealing something of value that is the product of market evaluation. This is why it would be illegal for somebody to steal another man's manuscript and place his own name on it. It is not that the ideas of the book are legally granted a monopoly by the state. What is granted a monopoly by the state is a person's name. *This is a monopoly that is granted by God*. The state simply honors that original grant of monopoly, as declared judicially by parents. The founders of a business have the responsibility of naming it. *Names are legal titles of ownership/responsibility.* The state doesn't create this title; the state enforces it. It is permanent. It extends into eternity for people. History is culminated by a permanent separation that is based on whether a person's name is in the book of life or not. God enforces this title. This title is the judicial basis of the transfer of each covenant-keeper's ownership of the property he or she has accumulated in history, including wisdom, which is the supremely valuable form of property: *the knowledge of good and evil.*

Conclusion

The Bible does not authorize the civil government to extend temporary monopolistic privilege to the works of the mind. This includes patents. It includes copyrights. Trademarks are different. These are not a grant of privilege. They are also not temporary.

The economic case for patents and copyrights is weak. There is no widely accepted theory of copyrights and patents. Most economists have avoided the topics. Patents and copyrights are a product of special-interest legislation to benefit large, well-organized guilds of producers at the expense of unorganized consumers. This is done in the name of protecting private property and fostering economic growth. *The concept of intellectual property is an intellectual sham.*

Politicians in the West have granted monopoly favors to individuals and companies ever since the fourteenth century. This has been a matter of political favoritism. This extends positive sanctions to a few individuals, sanctions which are paid for by the violation of property rights of the masses. This transfers economic authority from consumers to producers. It creates profits on the basis of political coercion. This system undermines the free-market principle of high bid wins. It therefore undermines consumer authority, which is in turn based on the ownership of money, the most marketable commodity.

The exponential decline in the cost of data transmission, data storage, and data analysis is steadily undermining the system of patents and copyrights. Artificial intelligence is accelerating and will continue to do so. The key to economic success today for high tech firms is the speed of market penetration of a new technology. This works against income generated by patents. By the time a company attains a patent victory in the courts, which takes years, the technology may be obsolete. The temporal window of opportunity for a new technology to achieve market dominance is getting shorter. This is why the patent system of monopoly privilege granted by the state, which has prevailed for half a millennium, is unlikely to survive intact for another half century. The reduction of communications costs, when coupled with the reduction of the size of manufacturing enterprise, will eliminate most of the monopolistic gains that are today available to a handful of manufacturers, a handful of inventors, a handful of publishers, a handful of writers, and a handful of musicians. The vast majority of the world's population will benefit as a result of the steady shrinking of the temporary monopoly returns granted by governments in the form of patents. The rate of innovation will increase. The dominion process will extend its reach. Price competition will reduce the effects of the curse of the ground.

The principle of ownership described in the Bible never protected ideas. It never established a legal principle that would allow the state to enforce

the right of someone to profit from his idea by threatening non-paying users of his idea. Copyright was a product of the early nation-state, and its origin was political, not economic. The system was established to suppress ideas, not to promote them. The system broke down temporarily in Great Britain during the Civil War, from 1642 to 1649. Neither the king nor the Parliament could control printers outside their military jurisdictions, which kept shifting. That launched the first great wave of political pamphleteering in world history. There were too many bottles for the genies of political dissent to be controlled.

Today in the United States, copyright privilege lasts 75 years beyond the death of the author. Economically, this time frame is irrelevant. First, the vast majority of books published by traditional book publishers go out of print after the first edition. Second, of the tiny handful of books that go into to a second printing, most of them are not sufficiently profitable to sustain the publisher. The success of traditional book publishing is based on the sales of the top 1% of books published. These are the bestsellers that generate sufficient income to sustain the publishing firms. Third, these companies are no longer necessary for the distribution of books. They no longer offer a significant competitive advantage to new authors. New authors can publish online. They can sell their books through print-on-demand publishing. Fourth, a new author can select a niche market, which is the key to success for most businesses. There is no way that a conventional publishing house can master all of the niche markets that are available. They offer no advantages to authors. Fifth, for every book sold in a niche market, there is less time for the reader to buy and read a best-selling, mass-market book. *The reader's limited time is the great barrier to book sales, not the reader's limited money.*

Self-publishing through print-on-demand books is eating into the retail markets that had traditionally been available only to a handful of publishers. Their pre-Internet business model is doomed. The copyright system made possible that business model. Without corporate lawyers, the copyright system cannot protect authors. But it only protected the high income of about 1% of the authors before the Internet. This is why copyrights are no longer significant factors in the restriction of the spread of information. The book distribution system that was built on the basis of copyright law cannot function profitably in a world of digital transmission.

The key to success in publishing has always been marketing. Marketing has changed radically with the demise of bookstores and the rise of Ama-

zon. Book publishing companies may publish the books, but Amazon is going to sell most of the books that they publish, and Amazon will get most of the profits. This is the wave of the future. Traditional book publishers are steadily going out of business. They had the lawyers on retainer to threaten those small printers who violated the copyright rules. But the genie is out of the bottle. That is, the digits are out of the bottle. It only pays firms to sue medium-size pirate companies that are violating the copyright law, and only those companies that are inside the legal jurisdiction of the nation in which both publishers reside. If a violator's business is based on a website in a country that does not prosecute copyright violators, there is essentially nothing that a book publisher can do about this.

Copyright laws were always a violation of the biblical concept of property. They are now becoming economically obsolete. They will no doubt remain on the law books in Western nations, but they will be increasingly unenforceable in a world of digital technologies. Publishing success will be based on the development of mailing lists and websites, not lawyers. Of those authors who are ever paid royalties, they will be paid, not because they own copyrights, but because they sell their books online through the services of Amazon, Alibaba, and similar mass-market online retailers that are replacing the copyright-based traditional publishing industry.

Trademarks are likely to survive. Trademarks protect mass-market goods that are sold by retailers. Customers buy certain brands because they trust them. They go out of their way to make certain that they are not buying counterfeits. Customer loyalty is the basis of brand-name retailing. This is customer-based policing, not state policing. It is far more efficient than state policing. Retailers act as economic agents of customers to make certain that the products are not counterfeit. This will not change in the future. Trademarks are consistent with the Bible's concept of inviolable naming. Names matter for biblical law. Names matter for biblical economics. The market system will uphold this relationship. It is in the self-interest of customers to uphold it.

40

ECONOMIC LAWS

The words of wise people are like goads. Like nails driven deeply are the words of the masters in collections of their proverbs, which are taught by one shepherd. My son, be aware of something more: the making of many books, which has no end and much study brings weariness to the body (Ecclesiastes 12:11–12).

Analysis

This book is the culmination of six decades of study. It is based on 31 volumes of verse-by-verse exegesis of Bible passages relating to economic theory and practice. I wrote an additional ten volumes on applications of biblical economic principles. I have lost track of the number of articles, but it is in the hundreds.

I have now come to a point where I must summarize what I have found in 17 brief phrases. My work confirms the insights of Ecclesiastes. Of the making of books, there is no end. Yet this book constitutes something of an end. I do not expect to make any major economic discoveries in the future. I do not expect to have to rewrite this book. I surely hope I do not have to re-index it.

I would like to have produced this summary of what I have learned about economics in ten rules. That would be convenient. There will be one rule for each digit on each hand. But such was not the case. You will have to get seven toes involved.

I am encouraging you to begin writing your share of books. Perhaps one of these phrases will catch your attention. Perhaps you will write a book on one of them. Even if you do not intend to do any writing, you would be wise to commit them to memory, along with a few of the insights that I offer to explain the importance of these phrases. If you understand these principles, and if you apply them in your writing, lecturing, and thinking, you will be in a position to help others wrap their minds around the basics of economics.

In Chapter 2, I summarized the covenantal structure of Christian economics. Those points also deserve to be memorized. But these 17 have to do with economic theory in general. These are principles that are recognized by most people who call themselves free-market economists. If you can relate what you have read in this book to these brief phrases, then you really do understand Christian economics. If you can discuss these principles with another economist, and you can show how these principles are implications of biblical economic principles, then you possess the analytic tools of not only Christian economics, but of economic theory in general. You do not need any graphs. You do not need any equations. You just need a working understanding of these phrases as they apply to economic theory in general, but also as they apply to Christian economic theory.

I could have used this chapter in 1960 when I began this investigation of Christian economics. It would have enabled me to focus my study. I would not have had to start from scratch. You will not have to start from scratch.

I have called these economic laws. The question will arise: "Are these really economic laws?" Yes, they are. They are causal relationships that are sufficiently universal and sufficiently predictable that everyone would be wise to acknowledge their existence and also conform his thinking and his behavior to these laws. They are not laws in the sense that gravity is a law, but they are surely more understandable than gravity. Gravity is unexplainable. Why there is a connection between the planets and the sun, or between the sun and the Milky Way, or between the Milky Way and the other galaxies, remains unexplained. Attraction at a distance makes no sense—not across the room or across the galaxy. The mathematical rigor of the law of gravity is great, but it makes no sense. In contrast, the laws of economics make sense, but there is no mathematical rigor associated with them. In fact, the use of mathematics to explain them leads to conceptual errors.

These laws are laws in this sense: if you violate them, you will suffer negative consequences. Conversely, if you honor them in your thoughts and behavior, you will reap rewards. They are part of a system of sanctions that was divinely created and is divinely enforced. Humanistic economists do not believe this, but that is not your problem or mine.

I regard these as analytical principles. Analytical principles structure the technical details of economic theory. They are rules that enable economists to understand causation. They are not merely general principles. A general principle is this one: *God owns everything.* This is the judicial foun-

dation of Christian economics. But I see no way to invoke this general principle as an analytical proposition that can be used to understand economic causation. The dominion covenant rests on the cosmic economic principle that God owns everything because He created everything. But that which makes the dominion covenant analytically relevant as an economic proposition is God's continuing delegation of authority to mankind, which establishes man's responsibility. This leads to my first economic law.

A. Responsibility Accompanies Ownership

Christian economic theory must always begin with God's ownership. The fundamental principle of Christian economic theory is that God owns the world because He created it (Psalm 24:1–2). He has delegated limited ownership to mankind (Genesis 1:26–28). Each individual is therefore responsible to God for the proper administration of his share of God's assets. God will hold him accountable on the day of judgment for the administration of these assets. The parable of the talents (Matthew 25:30–41) and the parable of the minas (Luke 19:11–27) make this clear.

The essence of ownership is legal responsibility for the administration of whatever is owned. *Ownership is always a form of trusteeship.* Men are legal agents for God with respect to the assets they possess, including their skills, talents, and vision of the future. Society recognizes this arrangement by making owners responsible for the negative effects that their property imposes on other people. Civil governments acknowledge this. Social mores acknowledge this. Society brings negative sanctions against people who misuse their property by physically harming other individuals. There is no such thing as ownership devoid of responsibility.

One implication of this economic law is the inescapable fact that *as someone gets richer, his responsibility necessarily increases.* This is a cost of ownership. This is an inescapable aspect of the dominion covenant. People who seek wealth do not always understand that if they become successful, they will find themselves burdened with responsibilities that they had not considered. They may consider these legal burdens as negative sanctions. But these legal burdens are not supposed to be negative sanctions. They are positive sanctions. The biblical view of ownership is that men can legitimately pursue greater wealth, but only because they see themselves as stewards of God's property. The mandated program of success in the New Testament's framework of authority is service to others (Luke 21:25–28). There is

service upward to God, outward to consumers, and downward toward those who are under our jurisdiction. Then, finally, there is service to ourselves. Anyone who is unwilling to accept this burden of service is unwise to pursue greater wealth. On the other hand, if someone wishes to become a better servant, then he should pursue greater wealth. *Wealth in the biblical framework is a tool of service.* God increases our wealth when we have proven to be good servants, meaning good stewards of His property.

Most free-market economists see ownership as a social function: service to consumers. The owner administers property on behalf of others: a stewardship function. Non-owners impute economic value to this property. They bid for it. This is why it has a price. The owner must decide whose purposes his property should satisfy. Should he sell his property or rent it to the highest monetary bidder? Should he use it himself? Should he give it to a charity? He has to decide. He is legally responsible for making this decision. He is also economically responsible for making this decision. Free-market economics correctly identifies this social function of ownership, even though it does not understand the covenantal framework of both ownership and social service.

B. Ownership Implies Disownership

If you do not possess the legal authority to sell something, you do not own it. From a theoretical standpoint, *the right to sell something is the best economic definition of ownership.* It is also a highly practical definition of ownership.

If someone owns something, he is entitled to reap the benefits of ownership. But he is also liable for the responsibilities of ownership. He may decide that the benefits associated with transferring ownership are greater than the benefits of maintaining ownership. He therefore seeks another person to take this responsibility. He would like to get a high price for whatever it is he is selling. He would like to make a profit on the transaction. *The primary task, biblically speaking, for an owner is to decide whether or not he is equipped to bear the responsibility of ownership.* He should sell or not sell after having made this assessment. Responsibility is primary; profitability is secondary. This is why the subjective economic imputation of value is an aspect of exercising judgment. So is the subjective assessment of the degree of personal responsibility associated with maintaining ownership. They are both aspects of point four of the biblical covenant: judgment.

We are supposed to increase our skills as judges before God. This has to do with the application of biblical law and biblical morality to specific situations. This used to be called casuistry. That term has gone out of fashion. It was a theological term. But it should also be a general judicial term. It should be an economic term. The skill of evaluating the importance of property and opportunities for building the kingdom of God is an ethical skill, but it is also a judicial skill. It has economic implications.

Men focus on the economic return associated with a particular action. This focus is a mistake. The focus should be on the *degree of responsibility* of ownership vs. the transfer of ownership. To sell something is to transfer the responsibility of ownership to someone else. There are economic costs associated with transferring ownership. There are also economic costs associated with maintaining ownership. This is why Jesus told his disciples to count the costs (Luke 14:28–32).

Should you sell what you own and give to the poor? Should you keep what you own, find buyers for the output of what you own, and then hire workers to help you convert what you own into consumer-benefitting products? Should you be a donor or an employer? You can give something away to help the poor, or you can provide employment for helping the poor. Which should it be? Which is best for the extension of the kingdom of God? Which will make you more money? If you decide to use your capital to produce a product, and you then discover that consumers do not want to buy what you have offered for sale, you will lose money. You will also have lost the time you spent trying to get rich. It would have been a lot easier to have given away your property to the poor. You must exercise judgment in making this decision. You must impute economic value in making this decision. You must act as a trustee in the name of God and a steward on behalf of God in making this decision.

The system of private property established by the Bible necessarily involves the legal right of contract. If you own something, you have the legal authority to transfer this ownership. The civil government should enforce the terms of this contract if there is ever a privately irreconcilable legal dispute about the meaning of these terms.

Another implication is this: the idea that government ownership of property is a form of common ownership is incorrect. If you cannot sell your share of this common ownership, then you do not own it.

C. No Free Lunches

Among free-market economists, there is a popular phrase: "There is no such thing as a free lunch." A variation of this phrase is this: "You can't get something for nothing." Both of these phrases rest on a concept of scarcity. Scarcity is best defined, or at least best described, as follows: "At zero price, there is greater demand than supply."

There are a few free lunches. We do not pay for the air that we breathe. At zero price, there is greater supply than demand. Therefore, air is not an economic good. It is not a factor in economic calculation. But clean air is an economic good. Polluted air is an economic bad. To clean the air in order to escape the pollution, somebody is going to have to pay something. Warm air in winter and cool air in summer are economic goods. We must pay to gain the use of them.

A significant conceptual error in economic theory is to imagine that something is a free good when it is not. For example, there is a phrase: "Information wants to be free." This is a silly phrase. First, information doesn't think. Second, lots of people are looking for ways to use the Internet in order to sell information. I certainly am one of these people. This is why I have a subscription website: GaryNorth.com. Somebody has to pay to collect information, evaluate it, and post it on the Internet, where people can find it by using Google. Google is one of the most profitable companies in the world. It is not providing its services for free. Here is a good rule of thumb: "When something online is free, you're not the customer, you're the product." One of the finest economic treatises ever written is Thomas Sowell's book, *Knowledge and Decisions* (1980). The book's premise is this economic principle: "There is no such thing as accurate free knowledge. Someone must pay for it." The book is an exploration of ways in which people have sought and paid for better knowledge, but it also explores those areas of the economy in which people have mistakenly believed that accurate information can and should be free.

The word "free" is one of the most powerful words for marketing anything. It is matched in the power to generate money only by the word "you." I speak from experience. I have been a direct-response marketer for over four decades. People know that they will be asked to buy something or do something if they respond positively to the word "free." They have learned this from experience. But, in some cases, people believe that they can benefit from something that is offered free of charge.

A major problem comes when politicians invoke the word "free." When a politician promises something for free, we can be sure that he has a plan to coerce someone to pay for the free good or service. Whenever you hear a politician use the word "free," keep your hand upon your wallet, and your back against the wall.

D. More Is Better

This is a fundamental principle of all economic theory. Put differently, *something is better than nothing*. If this principle were not true, it would be impossible to devise a theory of predictable economic cause-and-effect.

Whenever an economist says more is better, he also has in the back of his mind this qualification: *at the same price or a lower price*. He may not say it, but it always qualifies his assertion that more is better. More may not be better at a higher price, but more is always better at the same price or lower price. This is the economist's most widespread use of this assumption: other things remaining constant (*ceteris paribus*).

Why is more better? In the religion of mammon, it is better because it offers owners more opportunities to consume. But this makes little sense when we discuss the motivations of successful entrepreneurs who are wealthy. It makes zero sense when we are discussing superrich individuals who are worth so much money that if they spent the equivalent of a month's worth of income for the average person every day, they could not possibly consume their wealth in a lifetime. They are not working to consume. They are not bearing the uncertainty of ownership for the sake of greater consumption. They believe that more is better, but they do not believe that more is better for the sake of their own consumption or consumption by their children. To begin with the assumption that more is better because it enables people to consume more becomes ever-less relevant in a world in which there is compound economic growth.

More is better because of the dominion covenant. It is God's property that we are managing. The parable of talents makes this clear. God wants more, not for the sake of consumption, but for the sake of dominion. He wants more for the sake of God's plan for the ages. He wants to give it away. He wants to give it to the church. But the church in the world beyond the final judgment will continue to extend the dominion covenant. God is infinite. Mankind will never comprehend God fully. Mankind will never find all of the possible uses for the creation. There is always more to be learned.

We are not moving toward equilibrium. We are not moving toward satiation. On the contrary, we are moving toward greater expansion and development. Dominion is a never-ending process. *More is better for the sake of the dominion process*. It is not an autonomous process. It is part of God's decree for the extension of the dominion covenant in time and eternity.

God wants more from His stewards. This is the ultimate grounding of the phrase: more is better.

E. Incentives Modify Behavior

This phrase is an extension of the previous phrase: more is better. This phrase ultimately has to do with covenantal sanctions. The intermediary covenantal sanctions are heaven vs. hell (Luke 16). The final covenantal sanctions are the post-resurrection new heaven and new earth (Revelation 21, 22) vs. the lake of fire (Revelation 20:14–15). Historical sanctions reflect the ultimate covenantal sanctions. They are positive and negative. They are more and less. They are profit and loss.

Economic theory rests on the assumption that people make decisions in terms of whether they think their decisions will lead either to positive sanctions or negative sanctions. These decisions have to do with the allocation of scarce resources. In other words, they are part of the stewardship process. They pursue positive sanctions because God requires this. *More is better*. They seek to avoid negative sanctions because God requires this. *Less is worse*. We see this principle applied in the parable of the stewards. The rebellious steward buried his coin. After the owner condemns him verbally, he has his subordinates give that coin to the most successful steward. "Therefore take away the talent from him and give it to the servant who has ten talents. For to everyone who possesses, more will be given—even more abundantly. But from anyone who does not possess anything, even what he does have will be taken away. Throw the worthless servant into the outer darkness, where there will be weeping and grinding of teeth" (Matthew 25:28–30).

From an organizational standpoint, whoever designs the organization's rules must consider carefully the goals of the organization. Then he or a committee must design a system of institutional sanctions that persuades employees to pursue one set of goals that will be beneficial for the organization, and also avoid certain kinds of behavior that will lead to setbacks for the organization. The economist teaches that people respond to incentives.

If the marketplace rewards one kind of behavior, then people will behave accordingly.

A clever critique of government programs to reduce poverty is this one: "When the government pays people to be poor, the market will respond accordingly." Conclusion: if you want more poor people, pay them. But, of course, politicians insist that they do not want more poor people. They want to reduce the number of poor people. But their programs never seem to accomplish this. That is because of the nature of the incentives that the programs offer. *The incentives are inconsistent with the goals of the programs*. The subdivision of economics known as public choice theory recommends that economists, policy-makers, and voters examine the incentive structure of government programs in terms of this presupposition: "The results of the institutional incentives will be beneficial to the administrators of the programs."

F. High Bid Wins

This is the governing rule of every auction. When participants attend an auction, they are not resentful of the principle of distribution governing the auction. They understand that, at the end of each round of bidding, the highest-bidding bidder will take home the item offered for sale. This is a simple way to allocate scarce resources. No one complains that the person who made the highest bid became the owner of the property. This bidding process reduces antagonisms. It establishes peace. Peace in turn creates an incentive for other auctioneers to enter the marketplace and make available additional items for sale.

The free market is a gigantic auction. It is not just that the free market is best understood as a gigantic auction. It is in fact a gigantic auction. The price system is the result of competitive bidding in this gigantic auction. The governing principle of "high bid wins" is structured in terms of this economic law: "more is better." More money is better for the producer than less money. It is also better for the retailer or middleman. Consumers want producers to continue to work on their behalf. Therefore, they understand the distribution principle of high bid wins, and they abide by it whenever they enter the marketplace to make purchases.

If bids continue to be high, auction after auction, other auctioneers will enter the marketplace to supply it with even more goods. These new auctioneers see an opportunity: a single auctioneer who is attracting many bid-

ders with large bank accounts. They wish to take advantage of this opportunity. The result of this will be a greater number of opportunities for bidders to purchase goods at prices lower than they had been paying to a single auctioneer.

Because the general public does not understand that the free market is a gigantic auction in which prices are part of the bidding process, people in their capacity as citizens grow resentful of the outcome of the auction process. They resent the fact that those who make the highest bids become owners of property. As citizens and voters, they pressure politicians to pass laws that interfere with the auction process's governing principle. One outcome of such laws is a reduced supply of auctioneers offering products for sale. Another outcome is that the government must impose a different system of allocation that is based on a different principle from high monetary bid wins. It may be the principle of "highest number of votes wins." Or it may be the principle of "highest level of campaign donations wins."

All of this is the result of this fundamental economic issue: *scarcity*. At zero price, there is greater demand than supply.

G. Supply and Demand

The phrase "supply and demand" is almost a stand-alone phrase. It has become a catch phrase to describe the market process. It is an accurate phrase. It accurately describes the free market. Even more important, it accurately describes the free market process. *The market process is the heart of the free market's system of ownership allocation.*

Here is the two-part *law of demand*: "When prices fall, more is demanded. When prices rise, less is demanded." Here is the two-part *law of supply*. "When prices rise, more is supplied. When prices fall, less is supplied." I will now do my best to explain these two laws.

Some people want to sell goods for money. Other people are willing to spend money to buy goods. These people interact in order to make exchanges. Owners disown one thing for the sake of buying another thing. Those supplying goods are owners of goods. Those supplying money are owners of money.

Consider rising demand. As owners of money increase their bids against each other to become owners of goods and services, suppliers are alerted by rising prices to the possibility of making profitable sales. Listed prices are the specific results of actual sales. If prices are high enough to attract the atten-

tion of potential suppliers, these potential suppliers will enter the marketplace and offer to sell at prices lower than the ones that recently prevailed. *Suppliers compete against suppliers.* When they compete, this leads to lower prices, better terms, improved quality, and free delivery. Consumers benefit.

When lots of consumers are willing to spend their money on goods that are quite scarce, sellers raise their prices. When an auctioneer calls for a higher bid, nobody in the room accuses him of being an exploiter. But when sellers ask for higher bids in a market that is not labeled an auction, consumers sometimes blame sellers for being exploiters. Sellers are governed by the auction's allocational principle of high bid wins. Because buyers do not understand the free market is a gigantic auction, they are sometimes tempted to blame the sellers for gouging them. But the gougers are not the sellers. The gougers are other consumers. *Consumers compete against consumers.* They bid up prices.

The law of supply and demand is really the law of resource allocation. It is an outworking of this law: *more is better.* Consumers want more goods. So, they want lower prices. Suppliers want more money. So, they want higher prices. Suppliers are not autonomous. Consumers are not autonomous. Suppliers need consumers to achieve their goals. Consumers need suppliers to achieve their goals. *The market process is the way that specific consumers and specific suppliers reconcile their individual plans.* The primary tool of this reconciliation process is the price system. It is a system of competitive bidding. Here is its rule: high bid wins.

H. Consumer Authority

Economists sometimes speak of consumer sovereignty. That phrase was coined by a friend of mine, W. H. Hutt. I was a graduate student when he was an elder statesman of economics. For decades, I used the phrase "consumer sovereignty." But I have become convinced that it is inappropriate.

The concept of sovereignty is a judicial concept. It has to do with legal rights. In the field of economics, it has to do with ownership. This is God-delegated ownership, according to Christian economics. Ownership applies to owners of money as well as owners of goods and labor. Owners of money and owners of goods and labor are equally sovereign judicially. They both should receive equal protection of their ownership rights by the civil government. In other words, *there is no conceptual difference between consumer sovereignty and supplier sovereignty.*

In contrast, there is a tremendous difference between consumers' authority and suppliers' authority. This is because consumers own money. Money is the most marketable commodity. This is the best definition of money. As the most marketable commodity, it has the widest marketplace of competing sellers. Sellers compete against sellers. Sellers are owners of goods and labor with relatively narrow markets. They make their profits by specializing in production. Specialized production is narrow production. So, sellers usually bid more fervently against other sellers to get consumers' money than consumers bid against other consumers to buy sellers' output.

There is an asymmetric market relationship between consumers and sellers. There is an English phrase: "He is in the driver's seat." The context is someone who is driving an automobile. The consumer is in the driver's seat. What he says, goes. He is more likely to walk away from a potential exchange than a seller is. That is because there are so many other sellers competing against each other to supply him. He is facing a wide market. Each of the sellers is facing a narrow market.

Critics with a bias against the free market have long complained against sellers who exploit consumers. They see sellers as dominant in the transaction. They believe in sellers' authority. This is because they do not understand that money is the most marketable commodity. They do not understand the implications of the fact that money is the most marketable commodity. They look at the fact that sellers initially set prices. They conclude that sellers have authority in market exchanges. This conclusion is incorrect. Sellers announce prices, but they cannot coerce consumers to pay these prices. Consumers can easily walk away from the deal. They can shop elsewhere. The fact that a seller announces a particular price for a particular item is an aspect of sellers' *sovereignty*. The seller has a *legal right* to ask whatever he wants for whatever it is he is selling. But sellers' sovereignty is not the same as sellers' authority.

They are radically different concepts. One is judicial; the other is economic. To put it in covenantal terms: one is based on trusteeship; the other is based on stewardship. In the marketplace, stewardship is more powerful than trusteeship. Consumers have more authority as stewards than sellers do.

I. Opportunity Cost

The word "cost" does not convey enough information. The concept of

cost is really opportunity cost. More specifically, it is *opportunity foregone* cost.

Jesus told His disciples to count the cost. This had to do with foregone opportunities. In the context in which He presented this, the foregone opportunities were opportunities to suffer losses. "For which of you who desires to build a tower does not first sit down and count the cost to calculate if he has what he needs to complete it? Otherwise, when he has laid a foundation and is not able to finish, all who see it will begin to mock him, saying, 'This man began to build and was not able to finish'" (Luke 14:28–30). The first calculation had to do with available resources. The second calculation had to do with public humiliation.

If the person decided to begin the project, he would have to spend money to complete it. Whatever he could have done with that money, had he decided not to begin the project, is the loss that he sustains. Specifically, the *most valuable thing* that he could have done with his money is what he pays to begin the project. This would be his forfeited opportunity cost. Second, there was a negative sanction of public humiliation. He could have avoided this negative sanction had he not begun the project. We do not have a good phrase to describe an *avoided negative sanction*. It is not an opportunity cost. Cost is a negative sanction. Avoiding public humiliation is positive.

A rational economic decision is one in which the expected positive outcome of the decision to spend money on something is *marginally* better than the expected positive outcome of the decision to spend money on something else. It is a matter of making decisions at the margin. One thing is a little bit better than something else. Anyway, we expect it to be a little bit better than something else. We do not take into consideration all of the other things that we might also have done with our money, all of which were inferior to that one thing that we use to evaluate the economic concept: *marginally worse or marginally better.*

It is easier to understand the concept of opportunity cost when we are discussing marriage. When you marry someone, you forgo the opportunity of marrying one person among all the others who might have been a good partner. Your cost of marrying someone is not the forfeited opportunity of marrying someone spectacular unless there was a real possibility that someone spectacular would have agreed to marry you. What you forfeit in marrying someone is the opportunity to have married someone else who

was marginally superior. This is not the language of romance, but it is the language of economics. I do not recommend that you say this to your spouse on your 50th wedding anniversary: "I still regard you as marginally superior to all the others I might have married."

J. *Ceteris Paribus*

We see this Latin phrase in economics textbooks, treatises, monographs, and scholarly articles. The phrase means this: *other things remaining constant*. This phrase is widely used in economic treatises, but it applies to all other academic disciplines. It is basic to the analysis of change. As I have already written, the most widespread economic application of this concept is this one: *at the same price*.

This goes back to the dualism between Parmenides and Heraclitus. Parmenides believed that logic is unchanging internally. He also believed that logic governs the world. But if logic does not change internally, then historical change does not change anything meaningful. Irrelevant things may change. Irrelevant things come and go. But meaningful things are understood and evaluated in terms of permanent logic.

In contrast is the realm of Heraclitus: everything changes. "You can't stick your foot into the same river twice." But the river is not the same. Then how can we speak of "the river"? Which river? What is a river? Is a river a stream? What is the unchanging reality by which we determine or decide whether we are dealing with a river or a stream? So, the followers of Heraclitus have to call upon the unchanging reality of Parmenides' trans-historical stability.

What is meaningful change? Economists, along with all other social theorists, offer logical theories of causation that somehow apply to history. But history keeps changing. How do we know which elements of history are relevant to our discussion, and how do we distinguish these elements from the incalculable number of historical changes that are not relevant?

Economists work to devise a logical system of cause-and-effect. As social theory goes, economics is by far the most logical system of cause-and-effect. It has better predictive powers than the other social theories. But it does so only on the basis of the judgment of a specific economist regarding what is relevant in the logic of economics and what is irrelevant in the realm of history. When I say "relevant," I mean relevant to a discussion of cause-and-effect that is based on supposedly unchanging economic laws.

There is a famous observation: "You can't change just one thing." This is an accurate assessment of historical change. When the economist invokes *ceteris paribus*, he is invoking a conceptual world in which changes that are not governed by his economic theory can be safely dismissed as irrelevant to the question at hand. But how does he know this? How can he prove this? He presents his argument. He hopes his readers will believe his argument. He dreads the day that his argument can be made irrelevant by the fact that crucial things do not remain the same. They change mightily, and they change significantly. His theory no longer predicts the future accurately. It no longer predicts human behavior accurately. Maybe it never did. Maybe it always was a castle in the sky.

Other things never remain constant. The best that economists can hope for is this: when things change, they do not significantly affect either the logic of their theory or the accuracy of their predictions.

K. Unintended Consequences

"The law of unintended consequences" is more of a slogan than it is a law that is found in an economics textbook. Yet, because of the inability of men to forecast the future perfectly, there really is a law of unintended consequences. We cannot change just one thing. When we change something, this launches a series of consequences that could not have been foreseen by anybody except God. When we adopt an economic theory to devise a policy or a plan to achieve a particular goal, we may achieve that goal, but we will inevitably also produce a series of consequences that we had not intended. Some of them may be positive. But, life being what it is, we will notice mainly the ones that are negative. We will especially notice the ones that are negative as the result of an opponent's theory of causation, which he then persuaded someone to implement.

The law of unintended consequences is a warning to all men they should remain humble. Cause-and-effect is complex. The minds of men are limited. In every realm of thought and every realm of action, we face this problem: "The best-laid plans of mice and men often go awry."

When he devised his theory of economic determinism, Karl Marx did not foresee the tyrannies that were built in his name. Vladimir Lenin was Marx's trustee. So was Mao Zedong. So were all of the imitators of these two tyrants. They acted in Marx's name. The critics of Marx in his lifetime could not foresee that Lenin, alone among European revolutionaries in the

late nineteenth century, would succeed in capturing a nation in 1917. Lenin did not foresee Stalin. The Soviet Union and Communist China were unintended consequences of Marx's theory. The number of executions committed by Lenin, Stalin, and Mao is unknown, but this may have been in the range of 90 million people. Those few adherents who still proclaim allegiance to Marx's name insist that the Soviet Union and Communist China were not really Marxist. Somehow, they were not really representative of Marx's philosophy. But they were representative. They were more horrendous than Marx would have forecasted, but those few people who analyzed Marx during his lifetime should have seen what could come as a result of his religion of revolution. Marx believed the Communist revolution would come in the industrial West. Instead, it came in the agricultural East. The revolution did not take place in the industrial West. It took place in the partially industrialized East of Russia and the agricultural East of China. They were unintended consequences, but they were consistent consequences.

L. Profit and Loss

Profit and loss are sanctions. They are sanctions of a very special kind, analytically speaking. They are the outcome of entrepreneurial foresight and entrepreneurial organization. An entrepreneur believes that future consumers will buy the output of his organization at prices that will produce a profit for him.

An entrepreneur makes a profit only because he can buy low and sell high. He can buy low because his competitors do not see the future opportunity, so they do not bid up the prices of the productive goods and labor services that he needs in order to bring a product to market. Similarly, he can sell high only because his competitors did not see the opportunity, and they do not bring the output of a competing product line to the market, thereby forcing down prices. *Profit comes from the inherent uncertainty of the marketplace.* People do not see the future clearly. Some people see it more clearly than others. It may be part of creative imagination. It may be that a person has access to information that is not generally available or is not believed. He has an advantage in the area of information. He has specialized knowledge that others do not possess or presently ignore.

Losses arise when an entrepreneur does not forecast accurately what consumers will be willing to pay, or he does not forecast accurately the costs

of bringing his goods to market. He buys too high, and he sells too low. He had great expectations, but reality smashes his expectations.

The lure of profit is so great that entrepreneurs launch ventures that probably will fail, statistically speaking. Most new ventures fail. Yet, in the society at large, consumers benefit from the competition of entrepreneurs. Consumers do not pay out of their pockets for the losses sustained by entrepreneurs who did not forecast the future accurately. Consumers benefit from the accurate forecasts and efficient methods of production adopted by entrepreneurs who bring to market goods and services that consumers are willing to pay for. They benefit from those entrepreneurs who accurately forecasted what consumers want to buy, when they want to buy it, and where they want to buy. They also benefit from failed entrepreneurial projects when the output of these projects is sold at a steep discount. Why do entrepreneurs sell their output at such low prices? Because of this economic law: *more is better*. Put differently, *something is better than nothing*. It is better to get some money out of a project that should never have been launched than to get no money out of it.

This is an aspect of another economic law, *the law of sunk costs*. It would have been better if the failed entrepreneurial venture was never begun. But it was begun. The entrepreneur then searches for ways to salvage something out of his bad decision. Perhaps he sells it online on an auction site. Perhaps he sells it to a discounter, who will in turn sell it at a discount to large retail stores that target people who are in search of bargains. It does not matter what the entrepreneur paid for raw materials, capital equipment, and labor in order to bring a product to market. Those costs are sunk. They are gone forever. He owns only the output of those sunk costs. He makes a decision as to how to bring in the most money from this output. If he wants to stay in business, he will ignore the sunk costs of the past. If he focuses on them, the sense of loss may paralyze him, and he may lose the optimism necessary to remain an entrepreneur. It is better for an entrepreneur mentally to write off past costs as sunk costs, and then do the best he can with whatever he has.

M. People Exploit Opportunities

The word "exploit" has a negative connotation. It is associated with economic persecution. But the alternative phrase, "take advantage of," also sometimes has that same pejorative connotation. So, I use the word "exploit."

If you are walking along the street, and you look down and see a gold coin in the gutter, will you reach down and pick it up? I think you will. You may look in a local newspaper or website to see if anybody has reported a lost gold coin. If you see such an announcement, you should contact the person who made the announcement. But probably you will not find the owner. So, you are the owner. In English, there is a phrase for this: "finders, keepers." Jesus used this judicial principle in one of His parables, the parable of the hidden treasure (Matthew 13:44–46). It appears in the main New Testament passage on the kingdom of God.

If you do not reach down, pick up the coin, and put it in your pocket, you have decided not to exploit an opportunity. But the opportunity was there. Someone else may exploit it. Perhaps no one will exploit it. The coin may go down the gutter's drain. Maybe it will remain lost. But it will always be your personal loss. You saw the opportunity, and you did not exploit it. Someone who did not see the coin will not experience a loss. *A loss only counts with opportunities perceived and then missed*. Someone who did not buy a stock that rose subsequently by 100-to-one did not experience a loss if he had never heard of that stock. On the other hand, if he did hear about it, and he dismissed it, then he did suffer a loss. He was ready to buy it, but he decided not to buy it. He made a conscious decision, and that decision cost him whatever profit he would have experienced as an owner.

Economic theory rests heavily on the fact that people exploit opportunities. This is why people take risks. This is why they bear uncertainties. This is why they sacrifice in the present in order to profit in the future. This fact is extremely important in price theory. If something is selling too low in one region or on one market, there will be investors who buy that item, and then sell it wherever it is more highly valued. If an entrepreneur makes a breakthrough in a new production technique, and if that technique is not patented by the discoverer, then other entrepreneurs will see an opportunity for a profit. They will use this new technique to increase output, and increased output will lead to lower prices as a result of price competition. Consumers benefit. High profits announce opportunities to entrepreneurs. Entrepreneurs take advantage of these opportunities.

High profits send a signal to entrepreneurs. This signal announces that consumers are willing to pay high prices for some good or service. This signal leads to new entrants into the marketplace to sell whatever it is that consumers have been willing to pay high prices to buy. *The entire market*

process is based on the fact that people exploit opportunities. If they did not exploit opportunities, there would be no way for the vast bulk of consumers to buy what they want at prices they are willing to pay. If there is no exploitation of opportunities in a free market, a handful of consumers with a lot of money will continue to buy the minimal output of some entrepreneur who had a great idea. Other consumers will not be able to buy the output of an increasing number of new entrants into the market. Why not? Because the new entrants either did not perceive the opportunity or else they ignored it. Worse, from the point of view of economic theory, they were not even looking for opportunities. They were not motivated by the lure of profit. They were content to sell the same old products to the same old consumers.

Consumers are also looking for opportunities. They shop. Now that they have the World Wide Web, they shop more intensely than ever. They are looking for bargains. A bargain is an opportunity. *Nobody gets upset when a consumer goes shopping for a bargain*. Yet some people who do not understand economic theory do get upset when they hear about businessmen who exploit opportunities. *Exploiting an opportunity is not the same as exploiting a poor person*. Exploiting an opportunity may be a way to raise the wealth of a poor person who could not otherwise have afforded to purchase some item.

The fact that people exploit opportunities is fundamental to a theory of progress and its related concept, economic growth. This is true of a biblical theory of progress, and it is also true of a humanistic theory of progress.

N. Sooner, Not Later

We are responsible in the present. We may not be alive to be responsible in the future. Our service to God as stewards is always in the present. It is focused on the future. All people are future-oriented to some extent. A covenant-keeper is supposed to be highly future-oriented. He cares about his future with respect to heaven and hell. He cares about his future with respect to the post-resurrection new heavens and new earth and also the lake of fire.

The fact that we are responsible now for whatever we own makes us responsible for the allocation of these resources in the immediate future for the sake of the long-term future. The sooner that we invest in a long-term venture that will probably generate a positive compound rate of return, the

more rapidly that this investment will grow in value. We are concerned with sooner because we are concerned with later.

If we have the choice of receiving something of value immediately or the same thing in the future, we ask for it now. We are responsible now for the administration of that asset. Only if someone is going to store it for us free of charge, and we need it stored for a period of time, will we reject the offer of delivering it to us now. Free storage would constitute something of value in exchange for delaying the delivery of the product now. *Free storage is the equivalent of a rate of interest*. It is not something for nothing. It is something of value for not having demanded immediate delivery.

This is the source of the rate of interest. This is why goods in the present are worth more to us now than the promise of the same goods in the future. The promise may not be valid. So, there is risk. But I am talking about the actual value of the item, irrespective of the risk of a forfeited promise. We are *responsible now*; therefore, resources are worth more now than those same resources delivered in the future. Our opportunities to put resources to immediate use are worth more to us now than those same opportunities in the future are worth to us now. If we delay the delivery of the item, we are forfeiting opportunities. If we surrender the present use of the item in exchange for a promise of its use in the future, we are surrendering opportunities. Opportunities are valuable. We do not surrender opportunities in the present for the sake of the same opportunities in the future.

O. Time vs. Money

Economic theory is a theory of trade-offs. It is a theory of *this*, not *that*. A trade-off is a theory of costs. If I buy one thing, I must pay for it by not buying something else. This is an aspect of scarcity.

The most significant trade-off that men face is this one: the kingdom of God vs. the kingdom of man. This is a trade-off between redemption and damnation. They are mutually exclusive. One or the other is inevitable in every person's life. It really is either/or. The cost of redemption was high. Men do not pay it. Christ paid it. But it was paid. However, this is not an economic trade-off for people. "For by grace you have been saved through faith, and this did not come from you, it is the gift of God, not from works and so no one may boast" (Ephesians 2:8–9).

With respect to an economic trade-off, the most significant one is time vs. money. Time is a constant. From the point of view of God's decree, we

cannot buy any more of it. But from the point of view of earthly decision-making, occasionally we can buy more of it. Medical treatment in a life-and-death emergency is an example. But these are rare cases. Time moves forward relentlessly. What we do with it makes a difference. We must sacrifice doing one thing in order to do something else. We pay for one activity or one result by means of forfeited time. This is an allocation decision.

Most young adults do not have much money. In comparison with total life expectancy, they have considerable time. As they age, they begin to run out of time. They may gain more money. No matter how much money they make, they will eventually run out of time. So, the value of their time increases in relationship to the value of their money. This is God's imputation. It may not be man's imputation. The difference between God's imputation and man's imputation is best seen in the Bible with Jesus' parable of the rich man who planned to build barns to store his grain. "He said, 'This is what I will do. I will pull down my barns and build bigger ones, and there I will store all of my grain and other goods. I will say to my soul, "Soul, you have many goods stored up for many years. Rest easy, eat, drink, be merry."' But God said to him, 'Foolish man, tonight your soul is required of you, and the things you have prepared, whose will they be?'" (Luke 12:18–20). He ran out of time that night. He was at no risk of running out of money. He had big plans for the future. He had no future. This is a biblical model of foolishness.

For a covenant-keeper, the money value of his time should constantly be increasing. This was not the case in the parable of the rich man who wanted to build barns. He placed an extremely low value on his time. This is a warning against pricing our time so low. *As the supply of our available time decreases, it should rise in value in our subjective imputation.* Most individuals have a rising demand for time as time runs out. If the supply of something steadily decreases, and the demand for it remains the same, then its price should rise. As people age, they should be far more alert to the remaining opportunities that they can purchase with their available time. The value of those opportunities should constantly be rising in the economic imputations of aging people. This is because opportunities also are in short supply. If people can purchase these opportunities with money, they would be wise to do so. If these opportunities can be used to build the kingdom of God, they are morally required to do so. As Jesus said about the parable of the rich man, "That is what someone is like who stores up treasure for himself and is not rich toward God' (Luke 12:21).

Because sooner is better than later, there is a time value of money. If you can do something now or do something later, you should do it now (at the same price). This is why there is a rate of interest on money. There is a rate of interest on any asset that is forfeited in the present in exchange for the promise of the same asset in the future.

If there is time value for money, there is money value for time. If they can be exchanged, then each is valued in relation to the other. If I work for someone else, I am exchanging my time for money. If I hire someone else, I am exchanging money for time. If my time is valuable, I may hire someone else to do a task that I want completed.

P. Variable Proportions

This law is better known as the law of diminishing returns. This law is both a physical law and an economic law. It is easier to understand the physical law.

A raw material that is found in nature is a product of nature. It is not the product of human action: technology or science. Every product of human action is the result of at least two complementary factors of production. When there is only one of these factors, there is no product. There is simply a resource. Technically, as a complementary factor of production is added to the production mix, there is a rapid increase in output. It goes from no output to some output in one step. Output will continue to increase until the point at which, technically speaking, there is an excessive quantity of the complementary factory production. This point is just beyond the point known as the *optimum technological production mix*. If more units of the complementary factor of production are added, the output will more and more resemble the complementary factor of production. The percentage of the complementary factor will continue to increase. This slows the rate of increase in output per unit of complementary resource input. This is the phase known as diminishing returns.

In economic theory, prices are crucial in establishing the law variable proportions. Whatever is the most efficient mix technologically in terms of total output may not be the case economically, depending on the prices of the factors of production. But the same process applies: first an increase in value, then a slowing rate of increase. As more units of the complementary factor production are added, at some point the cost of one additional unit will be greater than the added value of the output of both factors of produc-

tion. This slows the rate of increase in *value per unit* of the complementary resource input. This is the phase known as diminishing returns. It begins just beyond what is known as the *optimum economic production mix*. The optimum production mix is dependent on prices. I have discussed this at length in Chapter 7 of my commentary in Exodus, *Authority and Dominion*. Pharaoh understood this law's application, which is why he required the Hebrews to produce the same amount of bricks without supping them with straw, as he had before Moses challenged his authority.

Q. Marginal Utility

Modern economics believes that economic value is subjectively imputed to goods and services. This was the revolution in economic thought that took place in the early 1870s. It marked the transition from philosophical realism to philosophical nominalism.

Economists use the ethically neutral term *utility* rather than *value*. This seems like a minor verbal point, which technically it is. But this verbal preference is an aspect of modern economics' commitment to a theory of value-free economics. So, it is not a minor point with respect to economists' epistemology.

There were two crucial insights of the economic revolution of the 1870s. One of them was the move from realism to nominalism, meaning the move from objective value to imputed subjective value. But there was another important aspect: the concept of the marginal unit or the marginal decision. This had to do with the idea of one additional unit. This unit is the focus of decision-making: what you must give up in order to become the owner of one unit of some good or service. It is the idea of the trade-off in specific decisions. We do not make trade-offs between gold in general vs. land in general. We make trade-offs in terms of a specific quantity of gold vs. a specific piece of land. These are marginal units. They are units *at the margin* of our decision-making. This is very different from the concept of something that is of marginal importance. That use of "marginal" indicates something of minimal value. Marginal value theory or marginal utility theory has to do with specific trade-offs.

Marginal utility theory says that, as an individual gains ownership of more units of something, each additional unit is worth less to him than the immediately preceding unit was worth to him. This is because he used the immediately preceding unit to satisfy some want that was high on his value

scale. The next unit of this item will be used to satisfy something lower on his value scale. This assumes, of course, that other things remain constant, especially tastes. This is the doctrine of declining marginal utility. It assumes the following: as people get richer, they will use their additional income to satisfy wants that are lower on their scale of economic values.

This insight was used by Cambridge University economist A. C. Pigou to justify progressive (graduated) income taxation. He argued that the benefits of any additional income to a rich person are lower than the benefits of this same income for a poor person. Therefore, the government can increase total social utility by taking away an increasing percentage of rich people's income and transferring it to poor people. His book, *The Economics of Welfare* (1911), became the single most important volume in the development of what is known as welfare economics.

The same line of argumentation could be used to show that rich people can easily afford to give a higher percentage of their income to charities than poor people can. Unfortunately for the theory, the opposite holds true in actual giving. Poor people are more generous in giving money away than all but the superrich.

Conclusion

If I gave more thought to it, I could probably come up with additional economic laws. But these are sufficient for understanding not only Christian economic theory but also humanistic economic theory.

If I had come up with more of them, this would only make it more difficult for you to remember all of them. It is the teacher's task and the scholar's task to keep them all in mind, and be ready to apply any of them to a specific analytical matter. The art of being a good teacher or good scholar is the art of casuistry: applying the appropriate general principle to the specific question at hand. There will always be an element of artistic creativity in scholarship because of the need for casuistry. If you review these laws from time to time, and think about them for a few minutes at a time, you will be better prepared for the inevitable task of casuistry.

I do not recall any economics textbook that listed the fundamental economic laws in the final chapter or anywhere else. Perhaps some economist has done this. But probably not. Why not? Because there is a risk that his peers would regard such an exercise as presumptuous, or elementary, or worst of all, not scholarly. I think it is a better strategy to help readers re-

member the most important issues than to become bogged down in the arcane language of academia just for the sake of impressing one's academic peers.

It is extremely difficult for people to remember long chains of reasoning. The more sophisticated and detailed these chains of reasoning are, the less equipped most people are to analyze them accurately. Therefore, it is better to know a few analytical principles well, and to apply them creatively and accurately to specific cases, than it is to remember long chains of reasoning, but then fail to apply them coherently to specific cases. *It is far better to do a simple thing well than to do a complex thing poorly*. This is true in every area of life.

Of all of these laws, the most familiar one and the most widely used one by humanistic economists is this one: *no free lunches*. They begin with this one. I recommend that you do not follow this lead. The most important law of economics is this one: *responsibility accompanies ownership*. Begin with this one. End with this one. Why? Because it points back to this law: *God owns everything*.

Then why not start with *God owns everything*? Because, from an analytical standpoint, *responsibility accompanies ownership* applies to a wider number of economic cases than *God owns everything* does. *God owns everything* applies to all fields of study and every area of life. *Responsibility accompanies ownership* applies more specifically to economic theory than to other academic disciplines. Also, *responsibility accompanies ownership* is neglected by most economists. They would not regard it as a fundamental economic law for analytical purposes. This is because the issue of responsibility is inherently a judicial and ethical issue. Humanistic economists insist that economic theory is value-free. They do not want to bring up the issue of responsibility if they can avoid it. This raises a question: "responsibility to whom?" They do not wish to raise this question. Instead, they talk about consumption as the ultimate goal of economic decision-making. This is the religion of mammon: *more for me in history*. This is the economics of the barn-builder.

41

ECONOMICS IS NOT PHYSICS

For it is written, "As I live," says the Lord, "to me every knee will bend, and every tongue will give praise to God." So then, each one of us will give an account of himself to God (Romans 14:11–12).

For we must all appear before the judgment seat of Christ, so that each one may receive what is due for the things done in the body, whether for good or for bad (II Corinthians 5:10).

Analysis

The New Testament's doctrine of the final judgment rests judicially and ethically on the concept of personal responsibility. There will be personal negative sanctions: hell (Luke 16) and the post-resurrection eternal lake of fire (Revelation 20:14–15). There will be personal positive sanctions: heaven (Luke 16) and the post-resurrection eternal new heavens and new earth (Revelation 21, 22). The eternal stakes are far higher than covenant-breakers believe. This is why Jesus warned His listeners: "For what does it profit a person if he gains the whole world but forfeits his life? What can a person give in exchange for his life? For the Son of Man will come in the glory of his Father with his angels. Then he will reward every person according to what he has done" (Matthew 16:26–27). [North, *Matthew*, ch. 35]

The doctrine of the final judgment is the biblical context of all decision-making. Nothing that someone thinks or does is outside of his personal zone of responsibility. There are eternal consequences for every thought, word, and deed. These consequences are personal. This element of comprehensive personalism is a reflection of the *cosmic personalism* that is taught in the first chapter of Genesis: God's creation of the universe. There is nothing that is purely impersonal. Everything is judged by God. Everything is subject to the Trinitarian imputation of meaning and value, including economic value. *God's subjective imputation is definitive and therefore judicially objective.* Men's subjective imputations are derivative. They will result

in objective sanctions: positive and negative. This is the context of the doctrine of responsibility. Jesus warned:

> The Lord said, "Who then is the faithful and wise manager whom his lord will set over his other servants to give them their portion of food at the right time? Blessed is that servant whom his lord finds doing that when he comes. Truly I say to you that he will set him over all his property. But if that servant says in his heart, 'My lord delays his return,' and begins to beat the male and female servants, and to eat and drink, and to become drunk, the lord of that servant will come in a day when he does not expect, and in an hour that he does not know, and will cut him in pieces and appoint a place for him with the unfaithful. That servant, having known his lord's will, and not having prepared or done according to his will, will be beaten with many blows. But the one who did not know and did what deserved a beating, he will be beaten with a few blows. **But everyone who has been given much, from them much will be required, and the one who has been entrusted with much, even more will be asked**" (Luke 12:42–48).

This element of personal responsibility governs every area of life. It governs economic decision-making. It therefore must govern economic theory. Any attempt by an economic theorist to reduce this element of personal responsibility in all decision-making must be regarded by Christian economists as a fundamental conceptual error: *an unstated attempt to substitute impersonalism for personalism*. This may not be self-conscious, but the implications of any such attempt are inherently anti-Christian. It is an attempt to separate economic theory from cosmic accountability.

A. Accountability

The Bible makes it clear that personal accountability is central to the concept of human action. Any discussion of human action apart from a discussion of man's accountability before God and other men is an attempt to establish the autonomy of man and an impersonal universe. This is why it is crucial to base economic theory on human action, which means personal action. This is necessary in order to affirm the New Testament doctrine of personal accountability. Men are responsible before God and

other men for their words and deeds. They are responsible to God for their thoughts.

A major advantage of Austrian School of economics is that it rests self-consciously on the doctrine of individual human action. Ludwig von Mises titled his magnum opus *Human Action*. He insisted on making a fundamental distinction between the methodology of economics, which is grounded in human action, and the methodology of physics. In his book, *The Ultimate Foundation of Economic Science* (1962), he made this crucial point. "Valuing is man's emotional reaction to the various states of his environment, both that of the external world and that of the physiological conditions of his own body. Man distinguishes between more and less desirable states, as the optimists may express it, or between greater and lesser evils, as the pessimists are prepared to say. He acts when he believes that action can result in substituting a more desirable state for a less desirable." *Men's valuation is the subject matter of economic theory*. This is not true of the natural sciences. "The failure of the attempts to apply the methods and the epistemological principles of the natural sciences to the problems of human action is caused by the fact that these sciences have no tool to deal with valuing. In the sphere of the phenomena they study there is no room for any purposive behavior" (Chap. 2, Sect. 3). Human action is purposeful. It is therefore personal. In his book, *Epistemological Problems in Economics* (1960), he wrote this.

> Human action invariably aims at the attainment of ends chosen. Acting man is intent upon diverting the course of affairs by purposeful conduct from the lines it would take if he were not to interfere. He wants to substitute a state of affairs that suits him better for one that suits him less. He chooses ends and means. These choices are directed by ideas.
>
> The objects of the natural sciences react to stimuli according to regular patterns. No such regularity, as far as man can see, determines the reaction of man to various stimuli. Ideas are frequently, but not always, the reaction of an individual to a stimulation provided by his natural environment. But even such reactions are not uniform. Different individuals, and the same individual at various periods of his life, react to the same stimulus in a different way. (Preface to the English Language Edition)

Mises placed individual decision-making at the center of his economic analysis. This is why the Austrian School of economics is closer to Christian economics than all rival humanistic schools of thought are.

B. Graphs, Calculus, and Physics

Modern economists rely heavily on graphs and higher mathematics to express their thoughts. There are exceptions to this, but very few. Mises was one of them. Another was the author of the most widely quoted academic economics article, R. H. Coase. His 1960 article, "The Problem of Social Cost," contained no graphs and no equations. It helped win him the Nobel Prize in 1991. But he has not been imitated by members of the economics guild.

It can be argued that the widespread use of graphs and higher mathematics is mainly a matter of academic positioning and the jargon required to get published. But the issue is more fundamental than the issue of academic convention. There are fundamental conceptual issues involved. These are matters of truth and falsehood, both in theory and practice.

1. Illegitimate Graphs

I go beyond what Mises wrote of the use of graphs in economic theory. In *Human Action*, he wrote that graphs may be used to illustrate supply and demand. "Always, what we know is only market prices—that is, not the curves but only a point which we interpret as the intersection of two hypothetical curves. The drawing of such curves may prove expedient in visualizing the problems for undergraduates" (XVI:2). This assessment is incorrect. Curves do not prove expedient. They always mislead, just as equations always mislead. Mises admitted this elsewhere. He criticized mathematical economists. "They formulate equations and draw curves which are supposed to describe reality. In fact they describe only a hypothetical and unrealizable state of affairs, in no way similar to the catallactic [market process] problems in question. They substitute algebraic symbols for the determinate terms of money as used in economic calculation and believe that this procedure renders their reasoning more scientific. They strongly impress the gullible layman. In fact they only confuse and muddle things which are satisfactorily dealt with in textbooks of commercial arithmetic and accountancy" (XVI:5). This intellectual muddling is universal in modern economic theory. It is the result of economists' implicit rejection of the discrete nature of prices and pricing.

2. Connecting the Dots

Prices are expressed as dots on a graph. They intellectually represent discrete prices. But the dots on an economist's graph are not visible. This is because economists connect the dots. They turn a series of discrete dots into contiguous lines. A line hides the dots. *Lines are inherently deceptive in economic theory.* They imply a continuity that cannot exist in the real world. Human action is about specific decisions. Decisions lead to objective actions: from here to there, from this to that. There are always costs associated with a decision. Jesus warned us to estimate the costs of our future actions (Luke 14:28–32). [North, *Luke*, ch. 35] We should think twice about such actions, He said. A graph offers no indication that anyone thought twice, or even once.

A dot represents a price. A price is the objective outcome of an exchange. The exchange was in money. *The best information available to two parties was focused on that decision*. If the price is the price of a specific quantity of a raw material or a certificate of ownership, it is the outcome of the *competitive bids from people with highly specialized information* about the asset. Economists say that a price is the outcome of buyers' expectations. The economic effects of those expectations regarding that future set of circumstances are already present in the price. *The price reflects a discount of the best information about the expected factors*. So, economists say, the next price in this series will be random when compared with the immediate price. We do not know if it will be a little higher or lower. But we do see stability in the graph of prices over time. Prices rise and fall, but they usually come back to the statistical mean. This phenomenon is called *regression to the mean*. "What goes up will come down."

When the dots on a graph represent hypothetical purchases of goods at hypothetical prices in a single instant of time, they become confusing to most people. They do not convey much information. Economists love to teach with these timeless graphs. They do not like dots, so they "smooth" the dots into lines. At that point, economists depart from reality altogether. A graph's only function in teaching economic theory is to make a verbal explanation clearer. If a graph is not perceived almost intuitively, it defeats its purpose. I have never seen an economists's graph that is intuitive.

3. Responsibility and Decisions

Murray Rothbard was a disciple of Mises. In his 1962 exposition of Mises' economic theory, *Man, Economy, and State*, Rothbard warned against

the importation of the categories of physics into economic theory. *Economic theory must be based on personal decision-making.* This means that individuals must perceive differences between the options available to them. They cannot perceive infinitesimal differences. He spoke of "the assumption of continuity, or the infinitely small step."

> Most writers on economics consider this assumption a harmless, but potentially very useful, fiction, and point to its great success in the field of physics. They overlook the enormous differences between the world of physics and the world of human action. The problem is not simply one of acquiring the microscopic measuring tools that physics has developed. The crucial difference is that physics deals with inanimate objects that *move* but do not *act*. The movements of these objects can be investigated as being governed by precise, quantitatively determinate laws, well expressed in terms of mathematical functions. Since these laws precisely describe definite paths of movement, there is no harm at all in introducing simplified assumptions of continuity and infinitely small steps.
>
> Human beings, however, do not move in such fashion, but act purposefully, applying means to the attainment of ends. Investigating causes of human action, then, is radically different from investigating the laws of motion of physical objects. In particular, human beings act on the basis of things that are *relevant* to their action. The human being cannot see the infinitely small step; it therefore has no meaning to him and no relevance to his action. Thus, if one ounce of a good is the smallest unit that human beings will bother distinguishing, then the ounce is the basic unit, and we cannot simply assume infinite continuity in terms of small fractions of an ounce (4:9).

Modern economic theory and exposition are both based on the concept of infinitesimal differences. This is the basis of the adoption of the calculus as a tool for discussing economic theory. Rothbard wrote this about mainstream economists. "They assume that it is possible to treat human action in terms of 'infinitely small' differences, and therefore to apply the mathemati-

cally elegant concepts of the calculus, etc., to economic problems. Such a treatment is fallacious and misleading, however, since human action must treat all matters only in terms of discrete steps. If, for example, the utility of X is so little smaller than the utility of Y that it can be regarded as identical or negligibly different, then human action will treat them as such, i.e., as the same good. Because it is conceptually impossible to measure utility, even the drawing of continuous utility curves is pernicious." But then he made a fundamental conceptual mistake. He refused to dismiss the use of economic graphs. "In the supply and demand schedules, it is not harmful to draw continuous curves for the sake of clarity, but the mathematical concepts of continuity and the calculus are not applicable" (Chap. 2, note 27). If he was correct about the calculus—and he was—then the use of graphs in conveying economic theory is illegitimate. Why? Because graphs use visual representations of infinitesimal changes: lines, not dots (discrete prices/decisions).

In footnote #1 of Chapter 5, he wrote: "Another difference is one we have already discussed: that mathematics, particularly the calculus, rests in large part on assumptions of infinitely small steps. Such assumptions may be perfectly legitimate in a field where behavior of unmotivated matter is under study. But human action disregards infinitely small steps precisely because they are infinitely small and therefore have no relevance to human beings. Hence, the action under study in economics must always occur in finite, discrete steps. It is therefore incorrect to say that such an assumption may just as well be made in the study of human action as in the study of physical particles. In human action, we may describe such assumptions as being not simply unrealistic, but *antirealistic*." Throughout his career, he rejected the use of the calculus. He wrote this in graduate school, probably in 1952: "A Note On Mathematical Economics."

> The use of the calculus, for example, that has been endemic in mathematical economics assumes infinitely small steps. Infinitely small steps may be fine in physics where particles travel along a certain path; but they are completely inappropriate in a science of human action, where individuals only consider matter precisely when it becomes large enough to be visible and important. Human action takes place in discrete steps, not in infinitely small ones. . . .

> The best readers' guide to the jungle of mathematical economics is to ignore the fancy welter of equations and look for the assumptions underneath. Invariably they are few in number, simple, and wrong. They are wrong precisely because mathematical economists are positivists, who do not know that economics rests on true axioms.
>
> The mathematical economists are therefore framing assumptions which are admittedly false or partly false, but which they hope can serve as useful approximations, as they would in physics. The important thing is not to be intimidated by the mathematical trappings.

Yet, a decade later, he was intimidated. He was intimidated by the graphs of the economics guild. *Graphs visually represent the calculus*. This is true in physics. It is also true in economic theory.

4. Rothbard's Use of Graphs

Chapter 2 of his book uses graphs in which the price points are discrete. Yet from Figure 18 onward, Rothbard adopted the standard teaching methodology of using graphs in which the lines are contiguous. This means that he implicitly denied the foundation of his own epistemology. Lines, being contiguous, are made up of hypothetical infinitesimal points. *Infinitesimal points are not aspects of individual human action*. Therefore, it is harmful to draw continuous curves. They distort human action and therefore Austrian School economic theory. Nevertheless, Rothbard imported the methodology of physics, as seen in graphs.

A graph that uses a line is easy to draw. It is a great temptation to use such graph. Conceptually, lines are incorrect. In actual use, they may appear harmless. But what we find in practice is this: the economist who uses the graph devotes precious space on a page to explaining the graph rather than explaining the economic concept behind the graph. Here is an example from *Man, Economy, and State*, Chapter 5. Rothbard offered Figure 44.

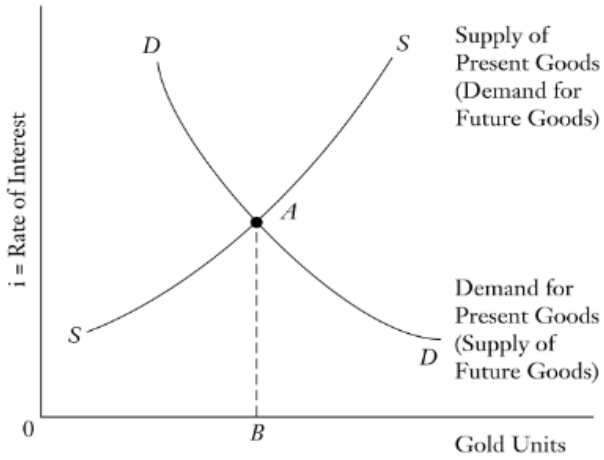

FIGURE 44. AGGREGATE TIME-MARKET CURVES

Here is his explanation of the graph. It is not lucid. It adds nothing to our understanding of economic decision-making. It focuses on the graph, not human action.

> A typical aggregate market diagram may be seen in Figure 44. Aggregating the supply and demand schedules on the time market for all individuals in the market, we obtain curves such as SS and DD.
>
> DD is the demand curve for present goods in terms of the supply of future goods; it slopes rightward as the rate of interest falls. SS is the supply curve of present goods in terms of the demand for future goods; it slopes rightward as the rate of interest increases. The intersection of the two curves determines the *equilibrium rate of interest*—the rate of interest as it would tend to be in the evenly rotating economy. This pure rate of interest, then, is determined *solely by the time preferences of the individuals in the society, and by no other factor.*
>
> The intersection of the two curves determines an equilibrium rate of interest, BA, *and* an equilibrium amount saved, 0B. 0B is the total amount of money that will be saved and invested in future money. At a higher interest rate than BA, present goods sup-

> plied would exceed future goods supplied in exchange, and the excess savings would compete with one another until the price of present goods in terms of future goods would decline toward equilibrium. If the rate of interest were below BA, the demand for present goods by suppliers of future goods would exceed the supply of savings, and the competition of this demand would push interest rates up toward equilibrium. If the rate of interest were below BA, the demand for present goods by suppliers of future goods would exceed the supply of savings, and the competition of this demand would push interest rates up toward equilibrium.

Rothbard's use of graphs is one reason why *Human Action* is easier to read and remember than *Man, Economy, and State*. Methodologically, Mises remained faithful to his epistemology. With one major exception—his use of the concept he called the evenly rotating economy (equilibrium with another name)—he resisted the importation of physics into economic theory. Rothbard surrendered on the issue of graphs. His magnum opus suffered as a result. He was a gifted writer. Sadly, he abandoned his mastery of the written word every time he used a graph. He used his verbal skills to explain a superfluous and ultimately conceptually misleading methodological import from mainstream economics. This was a waste of an otherwise productive resource: the written word.

Rothbard cited Keynes in a 1977 paper, "Praxeology: The Methodology of Austrian Economics." Keynes earned his bachelor's degree in mathematics. He did not earn a degree in economics. He was skeptical of the use of mathematics in economics. This is from *The General Theory* (pp. 297–98).

> It is a great fault of symbolic pseudo-mathematical methods of formalizing a system of economic analysis, that they expressly assume strict independence between the factors involved and lose all their cogency and authority if this hypothesis is disallowed: whereas, in ordinary discourse, where we are not blindly manipulating but know all the time what we are doing and what the words mean, we can keep "at the back of our heads" the necessary reserves and qualifications and the adjustments which we have to make later on, in a way in which we cannot keep complicated partial differentials "at the back" of several pages of algebra

> which assume that they all vanish. Too large a proportion of recent "mathematical" economics are mere concoctions, as imprecise as the initial assumptions they rest on, which allow the author to lose sight of the complexities and interdependencies of the real world in a maze of pretentious and unhelpful symbols.

Rothbard added this: "Moreover, even if verbal economics could be successfully translated into mathematical symbols and then retranslated into English so as to explain the conclusions, the process makes no sense and violates the great scientific principle of Occam's Razor: avoiding unnecessary multiplication of entities." This comment applies to every graph in *Man, Economy, and State*.

As students advance in the career path of academic economics, the complexity of the graphs multiplies. Worse; economists cease devoting space to explaining the cause-and-effect nature of the graphs. They assume other economists understand the visual representations. This becomes a condensed form of jargon. By "jargon," I mean language that is understood only by members of an academic guild. The jargon of a graph is not verbal. It is visual. It does not convey information in a straightforward way. It is like trying to translate a concept from one language to another. But a graph is not linguistic. It is a form of visual expression imported from physics into the realm of economics.

Because purposes are specific and prices are specific, there is no legitimate use of graphs showing curves. A curve is a line. Euclid's definition of a line as a "breadthless length." It therefore is a mental tool, not a real-world entity. In contrast, prices are objective. They are the product of competitive market bids or fiat declarations by bureaucrats. They are specific. They exist in time. So, a market price is unique. It is not part of a curve. Yet modern economics uses lines to describe economic processes. This is misleading. This same error underlies the application of the calculus to human action. This conceptual error is almost universal. Economists use graphs, equations, and the calculus to illustrate economic processes. Economists then use these inappropriate and misleading tools to develop economic theory. These tools convey the illusion of scientific precision.

The most respected American Austrian School economist in the academic community is Israel Kirzner. He was one of four men who received a Ph.D. under Mises, along with Hans Sennholz, George Reisman, and Louis

Spadaro. With the glaring exception of one book, Kirzner did not use graphs in his long and productive writing career. The exception was his upper division textbook, *Market Theory and the Price System* (1963). He targeted mainstream college classrooms. It is by far his least coherent book precisely because it is his most mainstream book. He let it go out of print. (It is available on the Mises Institute site: http://bit.ly/KirznerTextbook. Try to read pages 275–81. Note: I persuaded the Mises Institute to republish it. I knew that its copyright had lapsed. The Institute did not need Kirzner's permission to reprint it.)

5. Unstated Assumptions Behind Every Economics Graph

A graph has built-in assumptions that economists never bother to explain to readers or students. A crucial assumption is this: *a graph is timeless*. It expresses people's responses to changes in price in an instant of time—"other things remaining constant"—despite the fact that in the real world, people's responses to price change take time.

Second, a graph rests on an implicit assumption that a *change in price* does not raise questions in the minds of consumers regarding a possible *change in quality*. The economist who uses a graph makes the assumption, which he never reveals to students, that people do not make guesses about changes in quality when they see a significant change in a price for the same good or service. The economist who uses a graph implicitly assumes a constancy in human decision-making that does not exist in the real world.

A demand curve assumes the following about buyers: (1) their tastes do not change; (2) they think that the same item is being offered for sale at various prices (no counterfeit goods); (3) they think that each price is universal—no better price elsewhere. The graph therefore assumes two things: (1) a representation of timelessness is valid for describing events in time; (2) we can change only one thing. For a demand curve, the continuous line slopes down and to the right. The buyer is assumed to be ignorant of past pricing—higher on the curve—so as not to forecast a lower price in the future, and therefore refuses to buy now. The demand curve, like the graph itself, must be timeless.

A curve—demand or supply—assumes the following scenario: (1) a person or group of people will universally respond in a totally predictable way to separate price offers that (2) are made at the same time, (3) yet each offer must be considered by the price-taker—he is implicitly assumed by the

graph to be a price-taker—in complete isolation from all the other price offers, (4) which are infinite in number and infinitesimal in size and can therefore legitimately be represented by a curve. In short, the supply and demand curves are *Neverland incarnate*.

There is a tremendous benefit associated with refusing to use graphs and the calculus. This benefit is the ability to communicate economic theory to people outside the guild of academic economics. Academic economists rarely possess this skill. They fill their academic journals with unreadable mathematics. Their peers do not actually read these articles. Editors of economics journals sometimes have an arrangement with a mathematician to review the articles to make sure that the authors have not made mathematical mistakes. The editors are not sufficiently skilled as mathematicians to make this judgment. This point was made by liberal economist John Kenneth Galbraith in 1971 in his book, *Economics, Peace, and Laughter*. Galbraith did not use mathematics and graphs, and he was a superb master of rhetoric. He wrote for the general public. He was a best-selling author. It is a great advantage for any economist to master the skills of verbal communication without any reliance on graphs and mathematics. He sets himself apart from his peers, who have spent their careers learning how to write in jargon, both verbal and visual. This was what R. H. Coase did. It worked for him. He won the Nobel Prize.

The calculus also rests on the concept of infinitesimal changes. It works for physics. It does not work for coherent economic theory. It is inconsistent with the concept of personal responsibility for specific decisions to buy and sell. This defense will not work on judgment day: "The calculus made me do it!"

C. Equations

The use of equations in economics is based on an assumption, namely, that human action is predictable in such a way that mathematics can be used to understand economic decision-making. It assumes that there are mathematically predictable patterns of human action. This is what Mises denied. He wrote in *Human Action*: "Here we are faced with one of the main differences between physics and chemistry on the one hand and the sciences of human action on the other. In the realm of physical and chemical events there exist (or, at least, it is generally assumed that there exist) constant relations between magnitudes, and man is capable of discovering these con-

stants with a reasonable degree of precision by means of laboratory experiments. No such constant relations exist in the field of human action outside of physical and chemical technology and therapeutics" (II:8).

In 1938, Mises wrote a paper that was translated into French, "The Equations of Mathematical Economics and the Problem of Economic Calculation in a Socialist State." He pointed to the impossibility of the use of equations.

> The equations which describe the economic equilibrium give expression to this method of approach in mathematical language. They say no more and no less. They say: If an equilibrium situation is to be reached, it can only be a position such that it will no longer be possible to improve the satisfaction of wants: by making changes.
>
> It is particularly characteristic of these equations in economics that they are necessarily inapplicable to all practical purposes and computations. The equations of mechanics may help us to foresee future events, because the physicist is able to find out approximately the empirically constant relationships between physical quantities. If we insert these constants in the equations we can work with them. We cannot with exactitude of course but nevertheless with sufficient accuracy for practical purposes solve given problems. With the equations of economics it is a different matter. For within the sphere of human trading activities we do not know any constant quantitative relationships. All quantities that we are able to ascertain have therefore no general significance but only an historical one.

In his 1976 essay, "Praxeology: The Methodology of Austrian Economics," Rothbard wrote:

> Mises's radically fundamental opposition to econometrics now becomes clear. Econometrics not only attempts to ape the natural sciences by using complex heterogeneous historical facts as if they were repeatable homogeneous laboratory facts; it also squeezes the qualitative complexity of each event into a quantita-

> tive number and then compounds the fallacy by acting as if these quantitative relations remain constant in human history. In striking contrast to the physical sciences, which rest on the empirical discovery of quantitative constants, econometrics, as Mises repeatedly emphasized, has failed to discover a single constant in human history. And given the ever-changing conditions of human will, knowledge, and values and the differences among men, it is inconceivable that econometrics can ever do so.

D. Equilibrium

This is by far the most pervasive concept derived from physics that has been imported into economic theory. It is also the most perverse. I have gone into detail on why the entire concept is illegitimate in all aspects of human action. I refer you to Chapter 54 of the *Teacher's Edition* in this series.

Equilibrium assumes that humans are omniscient. The use of this concept implicitly assumes that we can better understand the world by means of the assumption that people in theory can be God. Equilibrium explains economic causation in terms of an assumption that cannot apply to human action. It is offered as a way of understanding human action, yet by definition, it cannot possibly apply to the realm of human action. Mises and Rothbard usually avoided the use of this term, but they substituted a phrase that is straight out of physics: the *evenly rotating economy*. They both used this acronym: ERE. They both admitted that this cannot exist in history. Yet they both invoked equilibrium or its equivalent, which cannot possibly apply to human action, in their attempt to explain human action. Anyone can go to the Mises Institute's website and access PDF copies of *Human Action* and *Man, Economy, and State*. He can search for the phrase "evenly rotating economy." He can also search for the acronym ERE. In the search bar, he must use [space] ERE [space] in order to avoid hundreds of hits for *there.*

Mises did use the term in a 1938 article, "The Equations of Mathematical Economics and the Problem of Economic Calculation in a Socialist State." He wrote: "The state of equilibrium which our equations describe is a purely imaginary state of equilibrium. It is merely a hypothetical, though indispensable, tool of analysis which has no counterpart in reality." He called the concept indispensable. It is not.

No one should ever use either the concept of equilibrium or the evenly rotating economy. Whenever you see either concept invoked, you must search for a different explanation of human action. There is nothing correct about this concept. It is completely fallacious. It always leads to misunderstanding. It is a conceptual liability. It begins with the omniscience of man as the standard of theoretical evaluation.

E. Elasticity and Inelasticity

In every college level textbook in economics, you will find these words: *elastic* and *inelastic*. They are applied to prices. What you will not find in any college level textbook in economics are these two words, which are the meaning of these two phrases: *price-sensitive* and *price-insensitive*. I have never seen any economist define the words elastic and inelastic by means of these two phrases.

What we have here is a classic importation of a category of physics into economics. This importation does not convey any clarity. On the contrary, it confuses students. Yet the two words have been used in economics textbooks and articles for so long that economists do not seem to understand that the students do not understand exactly what these words mean. The students are supposed to intuit what these words mean. If students were told in straightforward English that an elastic price is a price to which consumers are sensitive—to which they will respond rapidly—it would be easier for them to understand the word. But there is no need for them to understand the word. The word conveys no knowledge about human action. It is a word related to physics, not human action. Here is the official definition of the word: the percentage change in quantity divided by the percentage change in price. Economists talk of elasticity of supply and elasticity of demand. Even worse, they assign numbers to this inappropriate word. They talk of an "elasticity of one." This is an elasticity in which the seller's lowering of the price does not lead to an increase in consumer demand that is sufficient to increase revenues. The seller breaks even. Why don't economists call it a break-even price change?

Here is an extract from Wikipedia: "Elasticity (economics.)"

> Elasticity can be quantified as the ratio of the percentage change in one variable to the percentage change in another variable, when the latter variable has a causal influence on the former. A

> more precise definition is given in terms of differential calculus. It is a tool for measuring the responsiveness of one variable to changes in another, causative variable. Elasticity has the advantage of being a unitless ratio, independent of the type of quantities being varied. Frequently used elasticities include price elasticity of demand, price elasticity of supply, income elasticity of demand, elasticity of substitution between factors of production and elasticity of intertemporal substitution.

This is followed by pages of equations. What a waste!

F. Mechanism

This term was imported into the social sciences over a century ago. The model for this is a machine. But the operations of a machine in no way describe human action. The use of mechanical analogies and metaphors came as a result of Newton's extraordinary breakthroughs in his explanation of physical cause-and-effect. The intellectual model of the machine became almost irresistible in the eighteenth century. It replaced for a time the imagery of a biological organism. In the history of social theory, these two metaphors, the machine and the body, have been used by theorists to explain human society. The apostle Paul used the metaphor of the body and its members to explain the church in two epistles: first Corinthians and Romans. This is why Christians speak of church members and membership. (Oddly, this metaphor appears in chapter 12 of both epistles.) The biological metaphor has become dominant in social theory as a result of Darwinism. But Darwin's whole concept of biological evolution was imported from eighteenth-century Scottish social theory. Scottish social theory was evolutionistic, a point emphasized by F. A. Hayek.

I have attempted to discipline myself never to use the phrase "mechanism" when speaking of the free market. I have substituted the phrase "market process." This is consistent with Austrian School economics. It is also consistent with Christian economics. The conceptual model of the free market is an auction, not a machine. This is because the free market really is an auction. The use of the metaphor of the auction is therefore appropriate. The market is not a machine.

G. Liquidity

This term is used for *marketable.* If an asset is highly marketable, it is called a liquid asset. This is ridiculous.

Conclusion

Economic theory is intensely personalistic. It has to be. It is a study of decision-making within the context of private property social order. It is highly individualistic. It is based on the idea of personal responsibility. This personal responsibility applies in history, but it also applies in eternity. Therefore, *any form of economic theory that de-emphasizes personal responsibility is an assault on the biblical worldview.* Modern economic theory has as its model physics. There is no responsibility in the inanimate world. Modern science sees the inanimate world as essentially impersonal. It is devoid of purpose. The Bible teaches otherwise. This purpose is imputed by God and also man. But for purposes of scientific analysis, because we cannot understand God's purposes for all physical causation, we do not use purpose in explaining physics. This is not the case with human action.

Any attempt to import either the language or the concepts of physics into economic theory is illegitimate. Physics has a completely different methodology. The physicist assumes that inanimate objects are not driven by purposeful behavior of their own.

Jagdish Bhagwati was a professor of economics at Columbia University. He once told this story to his class, and it has been repeated ever since. "If you are a good economist, a virtuous economist, you are reborn as a physicist, and if you are an evil, wicked economist, you are reborn as a sociologist." If true, this would leave economic theory to ethically mediocre economists.

There is a place for economics as an academic discipline. It is neither physics nor sociology. Nevertheless, "better sociology than physics." That was my conclusion in my book, *The Covenantal Structure of Christian Economics*. In those areas of life in which the market process is not allowed to prevail, either by custom or law, because you do not have the right to sell your wife, your church membership, or your legal status as a citizen, sociology does replace economic theory. Physics does not.

42

MICROECONOMICS AND MACROECONOMICS

Praise the Lord. Blessed is the man who obeys the Lord, who greatly delights in his commandments. His descendants will be powerful on earth; the descendants of the godly man will be blessed. Wealth and riches are in his house; his righteousness will endure forever. Light shines in the darkness for the godly person; he is gracious, merciful, and just. It goes well for the man who deals graciously and lends money, who conducts his affairs with honesty (Psalm 112:1–5).

He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today. It will happen that, if you will forget the Lord your God and walk after other gods, worship them, and reverence them, I testify against you today that you will surely perish. Like the nations that the Lord is making to perish before you, so will you perish, because you would not listen to the voice of the Lord your God (Deuteronomy 8:16–20).

Analysis

The Bible teaches that there is a predictable cause-and-effect relationship between covenantal obedience and success, including wealth. Ethics and economics are covenantally related. This relationship applies to individuals and families. It also applies to entire societies. Christian economics is therefore both microeconomic and macroeconomic. It applies to individual decision-making (micro) and corporate decision-making (macro).

This God-imposed correlation between ethics and wealth is supposed to give hope to covenant-keepers. This is part of God's providential administration of the affairs of men. It is an aspect of cosmic personalism. This is reflected in the famous aphorism of Benjamin Franklin in the late 1700s: "Honesty is the best policy."

The New Testament makes it clear that this covenantal structure of ethical effects in history is dominant. The positive sanctions of individual covenantal faithfulness accumulate into the hands of covenant-keepers. This is the basis of Paul's optimistic eschatology regarding history (doctrine of last things). "Then will be the end, when Christ will hand over the kingdom to God the Father. This is when he will abolish all rule and all authority and power. For he must reign until he has put all his enemies under his feet. The last enemy to be destroyed is death. For "he has put everything under his feet." But when it says "he has put everything," it is clear that this does not include the one who put everything in subjection to himself. When all things are subjected to him, then the Son himself will be subjected to him who put all things into subjection under him, that God may be all in all" (I Corinthians 15:24–28). [North, *First Corinthians*, ch. 17]

The language is clear: there will be a corporate victory of Christendom in history. This victory is not restricted to individuals. Neither was the original dominion covenant to Adam restricted to individuals. In the Great Commission, we are given the theological foundation of this joint dominion: the doctrine of the Trinity. God is a single God made up of three persons: Father, Son, and Holy Ghost (Matthew 28:18–20).

The dominion covenant will be extended in history. This fulfillment will not be perfect. That is because sin exists in history. It will not be fulfilled in the new heaven and new earth. That is because God is infinite, and the creation reflects God. Man will never have exhaustive knowledge. The extension of the dominion covenant is therefore eternal. But there is a temporal dividing line between history and eternity. That dividing line is the last judgment. Individuals participate in this program of kingdom extension during their lifetimes. Their covenantal heirs will also participate. Individuals live and die, but the kingdom of God does not die. Individuals are told to seek first the kingdom of God, and all things will be added to them (Matthew 6:33). But this inheritance is also corporate. It will eventually be transferred to Christ, who will in turn transfer it to God the Father. That is the message of I Corinthians 15.

There is covenantal consistency between ethics-based individual success and ethics-based corporate success. This means that there is consistency between ethics-based microeconomics and ethics-based macroeconomics. *It is a conceptual error to separate microeconomics from macroeconomics.* Methodological individualists are microeconomists. The most consistent of them deny the conceptual legitimacy of macroeconomics. In contrast, methodological holists deny the conceptual legitimacy of microeconomics. Methodological covenantalism affirms both, but only on this assumption: the Trinity, which is both one and many. Autonomous man refuses to accept the biblical covenant as the means by which God structures the economy. He therefore cannot reconcile logically methodological individualism and methodological holism. Microeconomics and macroeconomics remain in conflict. They may appear as separate sections of a college-level textbook, but these sections are taught as separate one-semester courses.

A. The Dualism of Micro and Macro Analyses

This has been a continuing debate, going back to classical economics.

1. Adam Smith vs. Karl Marx

In *The Wealth of Nations* (1776), Adam Smith argued that the basis of increasing national wealth is the free market, which is the product of what he called "the natural system of liberty." He did not speak of ethics, either personal or corporate, as the foundation of wealth. But he did in his earlier book, *Theory of Moral Sentiments* (1759). This book has had no impact on economic theory. Economists have never relied on the ethical analysis in the 1759 book to explain the economic logic of the 1776 book. They have built their defenses of the free market in terms of a hypothetical ethical neutrality.

Socialists and defenders of the welfare state have long complained that Smith made a conceptual error. He explained the economic success of nations in terms of the economic successes of individuals. This is an illegitimate argument, critics said. It is not possible conceptually to go from individual successes to national success. There is no cause-and-effect connection between the successes of individuals and the success of a nation. Karl Marx argued that the profits of the rich come at the expense of the poor: a theory of exploitation. He argued that this would lead to an inevitable proletarian revolution in industrialized nations. The laws of profit that apply to one segment of the economy do not apply to the whole.

His was an early version of the distinction between microeconomics and macroeconomics.

I must now deal with economic theory as it has been taught in universities, beginning in 1948. This focus is unfortunate in a book that I hope will still be read in a century or even longer. This discussion dates this book. I do not think that the Keynesian approach to economic theory will maintain its grip on economists a half century from now. Other interpretations of economic theory will replace it. Its fundamental error is that it is committed to methodological holism or collectivism, although not to the degree that socialist economics was. Socialists preached the state's ownership of the means of production. That intellectual tradition is now defunct. The visible failure of the Communist economic experiment in mainland China, 1948–1978, and its replacement with a government-regulated system of private ownership, beginning in 1979, produced the fastest rate of economic growth in a large nation in history. The subsequent failure of the Soviet economy in the late 1980s, and the replacement of Soviet Union by the Russian Federation in December 1991, ended the appeal of socialism for most economists. That left Keynesianism as the dominant heir to the tradition of methodological holism. This is called macroeconomics.

2. Keynes and Samuelson

Academic economics distinguishes between microeconomics and macroeconomics. This distinction is built into Christian economics. It is the implication of the doctrine of the Trinity. Academic economics did not clearly make the distinction between macroeconomics and microeconomics until the era of the Great Depression (the 1930s). The first economist to use the term "macroeconomics" was a Norwegian, Ragnar Frisch, in 1933. The concept is usually associated with the work of John Maynard Keynes, beginning with his book, *The General Theory of Employment, Interest, and Money* (1936). The concept did not begin to gain wide acceptance in academia until the fall of 1948, the publication date of what soon became the most widely assigned college textbook in the United States: Paul Samuelson's *Economics*.

Economics as taught in college textbooks today is overwhelmingly Keynesian. The few textbooks that are not Keynesian do not show students why Keynesianism is incorrect. They remain silent. Keynesianism teaches that economists who advise politicians and central bankers can devise sci-

entifically valid policies that will avoid national recessions. This is not central planning according to socialism, where the state owns the means of production. Rather, it is central planning in the form of specific kinds of economic incentives. These incentives are provided by the national government's policies of spending more money than it collects through taxation, i.e., borrowing from the private capital markets, and also by the expansion of the monetary base of the nation's central bank when it purchases the debts of the national government with newly created fiat money.

Keynesian theory depends on an unstated assumption that politicians actually pay attention to the specific policy recommendations of economists. *There is little historical evidence that politicians adopt specific spending and taxing policies in terms of advice from economists.* They adopt spending and taxing policies in terms of getting re-elected. Thus, causation is reversed in macroeconomic theory. Politicians make spending decisions in terms of specific budget expenditures. When these decisions produce a government deficit, as they usually do, a few incumbent national politicians feel the need to justify their corporate spending decisions. They invite a few Keynesian economists to testify publicly in favor of the politicians' deficit spending policy. These economists vocally support the politicians' policies, and thereby they indirectly support the politicians' re-election campaigns. This practice began in the 1930s. Western national governments ran huge deficits, beginning in 1931. Keynes' famous book, published in 1936, offered an arcane theoretical justification for these policies. He gained the support of British politicians and also a hard core of younger economists.

The following explanation is not a scientific one. It is surely not one found in any college textbook on economics. Nevertheless, it will help you understand the relationship between microeconomics and macroeconomics in civil government. This will in turn help you to understand the relationship between microeconomics and macroeconomics in economic theory. Imagine a group of people who agree to the following arrangement. Each of them is given a credit card. There are no limits on individual spending. At the end of the year, the total bill of all the cards (macroeconomics) will be paid for in equal shares by each credit card holder (microeconomics). In this arrangement, there is no economic incentive for anyone to reduce his spending. Every participant's goal is to spend more than his share of the bill. Every participant tries to outspend each of the others. Therefore, the total bill (macroeconomics) is larger at the end of the year than it would have been if

each participant had been required to pay all of his own bill but none of the others' bills (microeconomics). Now apply this logic to the spending policies of politicians. This is why national governments' deficits never end as long as interest rates on government bonds do not rise. Politicians prefer to have the government borrow money from the capital markets, which most voters ignore, rather than pay for all of the government's expenses through taxation, which taxpayers resent and may decide to resist politically at the next election. (James Davidson popularized this clever argument.)

Keynesian economic theory would not have been plausible prior to World War I. Peacetime government spending was a small percentage of any national economy. This was because the taxation powers were limited by law. Therefore, running a deficit in a government's budget would have had no politically manageable effect on any national economy. Taxes were low. Spending was low. In 1911, three years before World War I began, Great Britain established an income tax. In 1913 in the United States, the Constitution was amended in order to allow an income tax. Within months after the war began in August 1914, taxes were raised in Great Britain. But most of the war's expense was funded by government borrowing, not taxation. Rising taxes took place in the United States as soon as the United States entered the war in 1917. Rates of income taxation on the rich rose to unprecedented levels: around 70%. During World War I, European nations funded the war by massive increases of income taxation and massive expansions of fiat money by the respective national central banks. The war established a triple precedent of high taxation, high borrowing, and central bank monetary expansion. This triple precedent was never abandoned. It remains dominant in the world today.

3. Irreconcilable Approaches

A major problem with microeconomics and macroeconomics as taught in the textbooks is this: *they cannot be reconciled*. Microeconomics begins with individual purposes and decisions. This is methodological individualism. Mises was adamant in his rejection of methodological collectivism. He wrote this in his book on epistemology, *The Ultimate Foundation of Economic Science* (1962). "In studying the actions of individuals, we learn also everything about the collectives and society. For the collective has no existence and reality but in the actions of individuals. It comes into existence by ideas that move individuals to behave as members of a definite group and

goes out of existence when the persuasive power of these ideas subsides. The only way to a cognition of collectives is the analysis of the conduct of its members" (p. 81). He referred to "the mythology of methodological collectivism." This perspective is the logical outcome of all forms of nominalism. Nominalism begins with the individual; it ends with the individual. There is no way to add up objective economic value, given the premises of nominalism. There is no such thing as objective economic value, given the premises of nominalism. Mises was a philosophical nominalist. So was Carl Menger, the founder of the Austrian School. In contrast, macroeconomics treats the national economy as a separate autonomous force. On the first page of the Preface of the first edition (1948) of his economics textbook, Keynesian Paul Samuelson wrote this: "National income provides the central unifying theme of the book." His analysis was based on methodological collectivism.

These are rival concepts of economic causation. They lead to rival policies of government intervention. This conceptual separation is a stumbling block in modern economic thought. Is not some minor academic issue. It lies at the very heart of the rival views of the economy that are held by Keynesians and Austrian School economists. The other schools of economics can be found somewhere in between Austrianism and Keynesianism.

In first-year college courses in economics, one semester is devoted to microeconomics. The other semester is devoted to macroeconomics. Students are allowed to take either course first. That is because there is no logical connection between the two courses. They really are separate academic enterprises. You do not learn microeconomics by studying macroeconomics, and you do not learn macroeconomics by studying microeconomics. *This is an operational academic schizophrenia in modern economic theory.* Textbooks attempt to paper over this schizophrenia. Students wind up either confused or taking sides. Most of them take sides with Keynesian economics because this is the dominant outlook of most of the textbooks. Never really understanding the logic of Keynesianism, and unable to remember the formulas, most first-year students retain a political proclivity for deficit spending, but this not an outlook based on comprehension.

Keynesianism accepts the free market for the bulk of economic production and exchange. Keynesians insist, however, that the market's pricing system is insufficient to avoid economic recessions. In order to avoid recessions, central planners, meaning politicians who do not actually plan anything except their re-election campaigns, supposedly must expand govern-

ment spending. Most politicians applaud this advice. Keynesianism was invented overnight in 1936. This was at least six years into the Great Depression, when the entire Western world had already adopted the policies that Keynes recommended: deficit spending and central bank monetary expansion. Keynesianism was a belated academic justification for interventionist policies that had already been adopted by national governments throughout the West. That remains its function today: *policy justification, not policy formation*. There is no scientific budgetary planning at the national level. Politicians simply spend as much money as they can to support projects that will keep people in their districts employed. There is nothing scientific about this. There has never been anything scientific about this. Keynesianism provides the fig leaf of what is said to be science to justify increased spending by national governments.

4. Three Hypothetical "Ifs"

Keynesianism rests on three "ifs." These "ifs" apply to what Keynes said his theory could accomplish if governments would adopt them, as if governments had not universally adopted them over half a decade earlier, with few positive results in overcoming the Great Depression. He ignored this background, as do his disciples. In Chapter 24, the "Concluding Notes" of *The General Theory*, he wrote this. I highlight the "ifs."

> Our criticism of the accepted classical theory of economics has consisted not so much in finding logical flaws in its analysis as in pointing out that its tacit assumptions are seldom or never satisfied, with the result that it cannot solve the economic problems of the actual world. But ***if*** our central controls succeed in establishing an aggregate volume of output corresponding to full employment as nearly as is practicable, the classical theory comes into its own again from this point onwards. ***If*** we suppose the volume of output to be given, i.e. to be determined by forces outside the classical scheme of thought, then there is no objection to be raised against the classical analysis of the manner in which private self-interest will determine what in particular is produced, in what proportions the factors of production will be combined to produce it, and how the value of the final product will be distributed between them. Again, ***if*** we have dealt otherwise with the problem

> of thrift, there is no objection to be raised against the modern classical theory as to the degree of consilience between private and public advantage in conditions of perfect and imperfect competition respectively. Thus, apart from the necessity of central controls to bring about an adjustment between the propensity to consume and the inducement to invest, there is no more reason to socialise economic life than there was before (pp. 378–79).

These three "ifs" are the theoretical foundations on which mainstream academic economic theory rests its case. They are hopes regarding the wisdom of central planners and also the wisdom of politicians who will take the advice of the central planners. But economic recessions still come, despite the dominance of Keynesianism in academic institutions and government agencies. Also, price inflation never goes away, for central banks never go away.

B. Reconciliation

As I have already written, reconciliation is found theologically in the doctrine of the Trinity. The Bible's ethical and judicial policies favor the free market social order. They are the basis of collective prosperity. The clearest statement of this is found in Deuteronomy 8. Moses announced: "He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:16–18). [North, *Deuteronomy*, ch. 22] The positive and negative sanctions that are found in Leviticus 26 and Deuteronomy 28 apply to individuals and the nation. The covenant applied to individuals and the nation. The nation had sworn allegiance to this covenant in Exodus 19. Immediately thereafter, God announced the Ten Commandments (Exodus 20). Then he announced the case law applications of the Ten Commandments (Exodus 21–23). These laws are detailed. My comments on them fill two volumes of my commentary on Exodus, *Authority and Dominion*.

As a Trinitarian, I affirm the moral and judicial legitimacy of both one and the many. I therefore affirm the moral and ethical legitimacy of both

macroeconomics and microeconomics. But the macroeconomics that the Bible affirms is not the macroeconomics of Keynesian economists. Keynesian economists believe that the national civil government should intervene into the affairs of the market in order to thwart the outcomes of the voluntary market process. *Keynesian macroeconomics is a form of central economic planning.* Keynes admitted this in the Foreword to the German-language edition of *The General Theory*, which targeted German economists living in Hitler's Germany. This would have included economic advisors to the national government and the central bank.

> The theory of aggregated production, which is the point of the following book, nevertheless can be much easier adapted to the conditions of a totalitarian state [*eines totalen Staates*] than the theory of production and distribution of a given production put forth under conditions of free competition and a large degree of laissez-faire. This is one of the reasons that justifies the fact that I call my theory a general theory. Since it is based on fewer hypotheses than the orthodox theory, it can accommodate itself all the easier to a wider field of varying conditions. Although I have, after all, worked it out with a view to the conditions prevailing in the Anglo-Saxon countries where a large degree of laissez-faire still prevails, nevertheless it remains applicable to situations in which state management is more pronounced.

The Bible does not affirm either the legitimacy or the efficacy of central economic planning. The macroeconomics of the Bible affirms the existence of positive and negative economic corporate sanctions in history that come as a result of widespread individual allegiance or disobedience to the economic laws that God has established with respect to property, personal responsibility, legal liability, and ethics. There is no evidence of central economic planning in the Mosaic law or the New Testament's laws. The main example of central economic planning in the Old Testament comes from Joseph in Egypt. Joseph used the famine to make permanent bondservants of the Egyptians to the Pharaoh. He saved their lives, but only at the cost of their freedom. This was God's judgment against Egypt, and Joseph was the enforcer.

I call my position *methodological covenantalism*. I distinguish it from both methodological individualism and methodological holism/collectiv-

ism. My position is not based on the autonomy of the individual human imputer or the autonomy of the representative imputers who act as agents of the national government. The Bible does not affirm that the central government has any legitimate authority to plan the economic outcomes of individual owners' non-violent and non-fraudulent use of their property. Civil government is required by God to enforce a few laws against violence, theft, slander, accidental damage, and fraud: "dishonest weights and measures." The outcome of such enforcement will be God's blessing in the form of national economic growth. Moses wrote: "If you listen carefully to the voice of the Lord your God so as to keep all his commandments that I am commanding you today, the Lord your God will set you above all the other nations of the earth. All these blessings will come on you and overtake you, if you listen to the voice of the Lord your God. Blessed will you be in the city, and blessed will you be in the field. Blessed will be the fruit of your body, and the fruit of your ground, and the fruit of your beasts, the increase of your cattle, and the young of your flock. Blessed will be your basket and your kneading trough. Blessed will you be when you come in, and blessed will you be when you go out" (Deuteronomy 28:1–6). [North, *Deuteronomy*, ch. 69]

This is why it is possible to measure national economic growth. This is why statistical aggregation is possible. If it were not possible, then it would be impossible to assess whether a nation is advancing economically. Economists proclaim the legitimacy and desirability of economic growth, but this assumes that there is some way to aggregate prices in such a way that the aggregation will reflect either national economic prosperity or national economic recession. Such techniques exist: sampling and data correlation.

Conclusion

People do have an awareness of whether their economy is getting richer or getting poorer. People who lived during the Great Depression were well aware that the world economy was in a massive slump. Unemployment rose. Bankruptcies rose. There were signs all around of economic malaise. These negative economic factors were measured statistically by governments during this era. This was the era in which such measurements became more sophisticated. This was also the era in which macroeconomics first began to be developed as a separate academic subdiscipline of economic theory. The statistical aggregates confirmed the widespread subjective evaluation of

millions of citizens. People believed the economy was in a slump, and they were correct.

This does not justify governments' collection of economic data. The collection of past data provides the illusion that government bureaucrats can somehow wisely guide the future economy by means of widespread government interventions. In contrast, there is nothing illegitimate about the use of privately collected data to gain an assessment of the economic performance of the nation. These data may also confirm the biblical idea that God's benefits for individuals are also benefits for collectives.

The fact that the free market enables individuals to prosper is an argument in favor of the free market's benefits to the nation. The national *one* and the market's *many* are in agreement. The visible success and the statistical success of the free market in the final third of the twentieth century, plus the first two decades of China's economic growth in the twenty-first century, have silenced socialist critics everywhere. The economic success of the market order has been demonstrated around the world. Nevertheless, it is not illegitimate for humanistic defenders of the free market to use such statistics as evidence against socialist central planning. Pure nominalism denies this, but pure nominalism is conceptually incorrect regarding collectives. Pure nominalism is the philosophy of polytheism. It insists that there is no unified God who imputes value, including economic value, to collectives.

CONCLUSION TO PART 3

Oh how I love your law! It is my meditation all day long. Your commandments make me wiser than my enemies, for your commandments are always with me. I have more understanding than all my teachers, for I meditate on your covenant decrees (Psalm 119:97–99).

I have a tremendous advantage over all previous economists. I have applied the specifics of biblical law to the categories of economic theory. It took me from 1973 until 2012 to write my 31 volumes of economic commentaries on the Bible. That investment has finally paid off in the four volumes of this set. There was no way of knowing when I began investigating Christian economics in 1960 that I would ever reach this stage. I was not sure until 1963 that I should attempt to write a Christian reconstruction of economic theory. I did not know that it would take me this long. I did not know that it would take me this many hours: well over 30,000.

There are 32 chapters in Part 3. This is comparable to a college-level textbook in economics. But it is a lot shorter. This is not a textbook. This section has to do with theory. Unlike a textbook, it will be serviceable several decades after its publication. I would like to think that it will be serviceable several centuries after its publication. While there are references in some chapters to specific events and policies in a particular era, these are only examples. They are not meant to convey working knowledge of the details of these events and policies.

A. Breaking With Humanism

Chapter 1, "Trinitarian Ownership," makes it clear that this treatise represents a fundamental break from all previous economic theory. I begin with the New Testament's doctrine of God, not with economic scarcity. This makes it clear that my approach to the study of economics is theocentric. More specifically, it is explicitly Trinitarian. By means of Trinitarian

theology, I explain the problem of the one and the many as it applies to economic theory. I explain specifically why God's imputation of economic value is both subjective and objective. This solves the theoretical problem that bedevils modern economics and modern social theory in general, namely, the philosophically irreconcilable dualism between nominalism and realism. Nominalism is exclusively individualistic. It asserts that meaning and value come only from individual imputation. Realism, in contrast, asserts the existence of a fundamental reality that exists independently of human evaluation. In economic theory, nominalism undergirds all subjectivism, meaning all methodological individualism. Realism undergirded the classical economists' conflicting concepts of the labor theory of value and the cost-of-production theory of value, both equally erroneous. By means of the doctrine of the Trinity, the Christian economists can affirm both individual imputation and the underlying reality and meaningfulness of the world around us, including economic value. God's Trinitarian imputation is both subjective and objective. So is all economic theory. Humanistic economists do not explain how subjectivism and objectivism can be reconciled. This is not just a problem for economists. It is a universal problem of humanistic thought.

In Chapters 2 and 3, I discuss the question of the distribution of wealth. God is the source of all benefits, including wealth, as James affirmed. "Every good gift and every perfect gift is from above. It comes down from the Father of lights" (James 1:17a). [North, *Epistles*, ch. 17] This is the origin of private property. Any policy of a civil government to redistribute property in order to achieve greater economic equality is an assault on God's original distribution of wealth. This assault includes all subsequent redistribution that has been based on voluntary exchange, inheritance, or gifts. Such a government policy is based on the concept that political man is the true God. He is therefore wiser than the Bible's God. He is holier than the Bible's God. His word is the true word of God.

Chapter by chapter in Part 3, I covered the fundamental concepts of economic theory as set forth in modern textbooks. I reinterpreted them in terms of biblical revelation. This is not to say that I am arguing that all of the conclusions of modern free-market economic theory are incorrect. Rather, I am arguing that modern economists cannot consistently defend their conclusions by implicitly and silently assuming the accuracy of Kantian philosophical categories, whether the appeal is direct or indirect. *The combina-*

tion of Kantian dualism and Darwinian evolutionism undermines the philosophical foundations of modern free-market economic theory. In Part 3, I offered a series of blueprints for rebuilding economic theory's edifice. Humanistic economists have offered accurate insights into the market process, but they are unable to explain why this process exists. They are unable to defend their conclusions in terms of a moral system because they insist that all economic theory must be value-free. My response is this: "There is no such thing as a value-free lunch."

The theme that I came back to again and again in this section is this: *ownership is always associated with responsibility.* The free market social order is the inevitable outcome of widespread obedience to biblical law. More than any other system of ownership, it establishes a link between ownership and responsibility. The market process imposes economic sanctions on property owners. These sanctions may be positive or negative, but they are inescapable. Owners are self-interested decision-makers who allocate their property in order to obtain positive sanctions and avoid negative sanctions. Because owners are either winners or losers in the competition for consumers' money, they are the most interested parties in making sure that they do not waste valuable resources in their pursuit of profit. They have the best information on local market conditions.

The free market's system of profit and loss reflects life, which culminates in the final judgment. The New Testament in Matthew 25 makes this correlation between the free-market's sanctions and final sanctions. The section on the final judgment is preceded by the parable of the stewards. Jesus presented these descriptions as a unit. He who has ears to hear, let him hear. A word to the wise is sufficient.

B. Verse by Verse

By introducing each of the chapters by at least one biblical passage, and then offering exegesis of each passage before offering an interpretation of the authority of each passage for establishing and explaining some economic process, I have made it clear that the Bible is authoritative in economic theory. I understand that people find it difficult to follow long chains of reasoning. I also know that if someone memorizes a Bible passage, he is likely to be influenced by the exegesis of that passage. In this way, he may recall some of my economic analysis when he thinks about the problem raised in each chapter. Let me be specific. If you understand the meaning of

the passage because of my exegesis, you will be far more likely to remember the passage's application to a specific problem of economic analysis.

I hope that Part 3 will enable you to become an effective teacher of economics. If you have read volume 2, the *Teacher's Edition*, you understand how I used the metaphor of the pencil to explain a series of economic issues. The metaphor of the pencil is a powerful tool for explaining the market's ability to coordinate individual production despite the fact that there is no central planning agency. I also applied Bastiat's analytical principle of the things seen and the things not seen. This is sometimes called the broken window fallacy. I used that strategy in my book, *Christian Economics in One Lesson*. It worked for Henry Hazlitt. I hope it worked for me.

If you pursue the life of a scholar, you will have to read a great deal more about economic theory, economic history, and the relationship between law and economics. I had to do this in preparation for writing this book. I had virtually no assistance from Christian scholars who had written detailed books and articles relating these issues to the Bible, Trinitarian theology, and the history of the church's impact on economic theory. There was no body of literature when I began this investigation in 1960, and there is virtually none today. This is why Christian economics is a wide-open field. But this is nothing new. This has always been the problem. "He said to them, 'The harvest is plentiful, but the laborers are few. Therefore ask the Lord of the harvest to send out laborers into his harvest. Go on your way. See, I send you out as lambs in the midst of wolves'" (Luke 10:2–3).

You must become skilled in the art of casuistry. You must learn how to apply the general principles that you find in specific texts of the Bible to specific intellectual problems and economic practices around you. This is an art, not a science. But this is equally true of casuistry in every area of life. This is the exercise of Christian wisdom. This is the meaning of judgment. Ultimately, this is the task of understanding good and evil. There are no shortcuts. There were no shortcuts in the garden of Eden, and there are no shortcuts today.

In Part 4, I present a series of explicitly Christian applications of explicitly biblical requirements of Christian economics. The church from the beginning has been aware of the necessity of implementing these applications. There is still much work to be done in understanding the meaning of these principles and their applications today.

Part 4
KINGDOM

INTRODUCTION TO PART 4

But seek first his kingdom and his righteousness and all these things will be given to you (Matthew 6:33).

Jesus made it clear in Matthew 6 that there is an irreconcilable conflict between the kingdom of God and the kingdom of mammon, which can also be translated as the kingdom of wealth. "No one can serve two masters, for either he will hate the one and love the other, or else he will be devoted to one and despise the other. You cannot serve God and wealth" (Matthew 6:24). It is an either/or decision. [North, *Matthew*, ch. 14]

Humanistic economics, beginning with the British mercantilists in the late seventeenth century, developed economic theory in terms of the pursuit of wealth. Their concern was the expansion of national wealth, which really meant the development of a large gold hoard owned by the state. They saw national wealth in terms of an expansion of wealth controlled by the state. Adam Smith approached economic theory from a different standpoint. He denied the effectiveness of state intervention in improving a national economy. He saw free trade in the broadest sense as the source of national wealth. But he was still concerned with the theoretical principles of the development of wealth. He said so in his title: *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776). This was not true of his other book, *The Theory of Moral Sentiments* (1759). That book has had zero influence in the development of economic theory. Therefore, Christian economists must make a self-conscious break with the tradition of Adam Smith. Smith's vision was a vision of mammon. This is why humanistic economics must be reconstructed in terms of biblical principles. That is what my work has been about for over half a century.

In Part 3, I discussed 32 major applications of humanistic economic theory. I discussed them from the point of view of the presuppositions and methodologies of biblical scholarship, as I understand them. These 32 chapters represent a reconstruction of economic theory. So do the chapters in

Volume 2 of this book: *Teacher's Edition*.

In Part 4, I discuss seven issues that have long been ignored by humanistic economists. They are issues that are perceived by humanists as exclusively Christian, and therefore not relevant to the development of universal economic theory. They are peculiarities of Christian economic thinking. Economists would be willing to acknowledge that these issues may be relevant to Christians as personal moral guidelines, but they do not believe that these issues are universal in human affairs. They do not believe that all societies are governed by a sovereign God who has announced certain laws of ethics that are binding on all humanity. They do not believe in such a God.

The seven topics that I have selected are basic to a correct understanding of Christian economics. Some of these topics are familiar to most Christians: kingdoms in conflict, the Lord's day, the tithe, and charity. Others are less familiar: contentment, the calling, and the bride price. I present them here because all of them are part of the body of Christian economic theory. But they are also important for Christians in their understanding of their personal obligations in a world that is governed by God's laws. Honoring these principles is basic to long-term success, both individualistically and corporately in the sense of God's kingdom. God's kingdom has multiple institutions, and these principles apply to all of these institutions. These institutions are basic to all of society, but humanistic social theorists do not discuss theoretical cause-and-effect in these institutions in terms of the Bible's revelation of cause-and-effect in history. Humanists assert that they are investigating such matters from a completely neutral standpoint, but they are not. There is no such thing as epistemological and ethical neutrality when discussing God's revelation of causation in human affairs. I have explained why in Part 1.

The seven topics that I cover in this section do have applications in every society. Each society will handle these issues in a different way. But you will not find societies that do not deal with these topics in both theory and practice. For example, we find no society that does not have holidays of some sort. They may not recognize one day in seven as being a rest day, but they acknowledge the principle that mankind needs rest on a regular basis. Modern society, at least in the West, asserts that there are two days of rest per week. In every society we find systems of charity. We find ways of dealing with discontent. Humanistic economic theory does not discuss these issues

as separate categories. Economists do not believe that these categories should be considered as theoretically binding in the way that the law of supply and demand is binding. They do not believe that the success or failure of societies are in any way determined by laws governing these topics. They do not believe in such laws. They are willing to discuss the economic outcomes of the various ways that various societies honor these topics, but they believe that the laws of economic analysis govern the outcomes of these practices. They do not see these practices as possessing authority equal to the categories of humanistic economic theory. They do not believe that there is a right way or the wrong way to honor these requirements. They do not believe that economic success and failure are determined by the ways in which societies honor these requirements. They do not see them as requirements.

Christians should regard these seven topics as integral to any understanding of Christian economics as a separate academic inquiry. They should not regard these topics as peripheral to economic theory. That is because these topics are not peripheral to economic practice. If God requires something, Christians would be wise to develop a theoretical understanding of why God requires something, and why obedience to God's requirement has predictable outcomes: positive sanctions. Economic theory is a theory of cause-and-effect in history, and effects are sanctions. If there were no sanctions, there would be no such thing as social theory. If there were no explicitly biblical sanctions, there would be no such thing as Christian social theory. Economic theory has the most explicitly developed theory of cause-and-effect in social theory. So, Christian economic theory must deal with cause-and-effect in history. Part 4 is about causation.

43

KINGDOMS IN CONFLICT

No one can serve two masters, for either he will hate the one and love the other, or else he will be devoted to one and despise the other. You cannot serve God and wealth [mammon] (Matthew 6:24).

But seek first his kingdom and his righteousness and all these things will be given to you. Therefore, do not be anxious for tomorrow, for tomorrow will be anxious for itself. Each day has enough evil of its own (Matthew 6:33–34).

Analysis

In Matthew 6, we have the most detailed summary of what it means to be a Christian in a world of economic scarcity. The chapter begins a discussion of charitable giving. It is to be done privately, not publicly. "Take heed that you do not do your acts of righteousness before people to be seen by them, or else you will have no reward from your Father who is in heaven. So when you give alms, do not sound a trumpet before yourself as the hypocrites do in the synagogues and in the streets, so that they may have the praise of people. Truly I say to you, they have received their reward. But when you give alms, do not let your left hand know what your right hand is doing, so that your gift may be given in secret. Then your Father who sees in secret will reward you" (Matthew 6:1–4). [North, *Matthew*, ch. 11] It is clear from this passage that Jesus expected His people to expect rewards from God the Father in response to their charitable acts. It is not clear from the passage whether these rewards are to be experienced in history or beyond the grave. But there will be rewards from God in response to charitable acts performed by covenant-keepers as long as these charitable acts were conducted in private, and therefore beyond the applause of the crowd.

Jesus then instructed his followers to take exactly the same attitude with respect to prayer. "When you pray, do not be like the hypocrites, for they love to stand and pray in the synagogues and on the street corners, so that

they may be seen by people. Truly I say to you, they have received their reward. But you, when you pray, enter your inner chamber. Shut the door, and pray to your Father who is in secret. Then your Father who sees in secret will reward you" (Matthew 6:5–6). It is clear that we have had a fundamental change in public attitudes regarding public prayer. No one gains applause from the crowd for prayers on street corners. We no longer live under the Old Covenant. But there is no question that Jesus did expect his followers to pray to God in expectation of receiving positive sanctions from God.

Third, Jesus gave instructions on the proper way to pray. This is known as the Lord's prayer. This prayer calls upon God to provide positive economic sanctions. The nature of the prayer is unique in the history of private prayer. It begins with an affirmation of the corporate nature of this prayer. It begins with the words "Our father." It does not begin with these words: "My father." So, even in the privacy of our prayer lives, we are to think of God as the God of the collective known as the church. We are never to lose sight of the fact that He is the God of multitudes, just as he promised Abram in the original covenant, renaming him Abraham: "father of nations." Here is the Lord's prayer. "Our Father in heaven, may your name be sanctified. May your kingdom come. May your will be done on earth as it is in heaven. Give us today our daily bread. Forgive us our debts, as we also have forgiven our debtors. Do not bring us into temptation, but deliver us from the evil one" (Matthew 6:9b–13). [North, *Matthew*, ch. 12:B] Two things are important here. First, this prayer calls for God's victory in history. "May your kingdom come. May your will be done on earth as it is in heaven." Jesus expected his people to pray this prayer because He expected them to call on God to extend His kingdom across the face of the earth. The mark of this extension is the eradication of the difference between people's obedience to God's will in heaven in contrast to their obedience in history. There is an inherent and inescapable corporate optimism about this prayer. It is prayed in the name of the corporate entity: the church. It is prayed on behalf of the kingdom of God in history. These are not individual requests. They are corporate requests. If you have never heard a sermon on this aspect of the Lord's prayer, then either you have not been listening carefully to your pastors, or else your pastors have not been listening carefully to God. The text is clear. The second important thing is this: there are economic requests in this prayer. "Give us today our daily bread. Forgive us our debts, as we also have forgiven our debtors." Again, the focus of the prayer is on corporate rewards. Individuals

are to pray on behalf of the church, not just on behalf of themselves. When God answers the prayers for the church, he will thereby answer the prayers for the individuals who are praying on behalf of the church.

It would be a mistake to understand this prayer as a prayer for personal wealth as such. It is not. The language precludes such an interpretation. It is not a prayer for the individual to get rich irrespective of what happens to covenant-keepers around him. It is a prayer on behalf of the church as a community. When the church is blessed, individual Christians will be blessed.

The next section of the prayer has to do with individual wealth. Jesus warned against piling up treasure in history. "Do not store up for yourselves treasures on the earth, where moth and rust destroy, and where thieves break in and steal. Instead, store up for yourselves treasures in heaven, where neither moth nor rust destroys, and where thieves do not break in and steal. For where your treasure is, there will your heart be also" (Matthew 6:19–21). [North, *Matthew*, ch. 13] This is an explicit promise that covenant-keeping leads to rewards beyond the grave. This should be a person's primary focus when he thinks of rewards. *Positive sanctions that accumulate in heaven are vastly more important than positive sanctions that accumulate in history.* This attitude is fundamental to Christianity. There is no escape from this. There will be rewards. Some of the rewards may be in history, but historical rewards are subordinate to the rewards in eternity. This sets the agenda for understanding verse 24: "No one can serve two masters, for either he will hate the one and love the other, or else he will be devoted to one and despise the other. You cannot serve God and wealth."

In the original Greek text, the final word is not wealth. It is *mammon*. The word appears four times in the Greek New Testament text, but it appears nowhere else in Greek literature. It occurs in three places in Luke's parable of the corrupt steward. This steward was in charge of his master's operations. He went to men who owed money to his master, and he reduced their debts. He was currying future favor from these beneficiaries. I have marked the English words that are used to translate mammon. This is probably the most difficult parable to interpret. In the King James Version (1611), it is translated as mammon. In the modern translation of the Bible that I use in this book because it is in the public domain, the English Literal Unlocked Bible, the translator translated the word as wealth. "I say to you, make friends for yourselves by means of unrighteous **wealth**, so that when it is

gone, they may welcome you into the eternal dwellings. He who is faithful in very little is also faithful in much, and he who is unrighteous in very little is also unrighteous in much. If you have not been faithful in using unrighteous **wealth**, who will trust you with true wealth? If you have not been faithful in using other people's property, who will give you money of your own? No servant can serve two masters, for either he will hate the one and love the other, or else he will be devoted to one and despise the other. You cannot serve God and **wealth**" (Luke 16:9–13). [North, *Luke*, ch. 40] Jesus clearly differentiated two kinds of wealth. We should understand the difference between them. Unrighteous wealth is what Jesus prohibited. Therefore, it is also what He was prohibiting in the passage in Matthew.

Jesus did not say it is wrong to pursue wealth. He said that it is wrong to pursue a certain kind of wealth. What kind of wealth is this? It is wealth that accumulates only in history. It is wealth that a person pursues for his own use. This does not necessarily mean consumption. It means wealth that he pursues for whatever purpose. It may be to build his reputation as a charitable person. It may be his goal to accumulate a vast corporate empire. Whatever it is, it benefits him primarily. It does not accumulate beyond the grave. It is the pursuit of *autonomous wealth*. I have summarized it as follows: *more for me in history*.

This is the background for Jesus' designation of the ultimate goal in history for every covenant keeper: "But seek first his kingdom and his righteousness and all these things will be given to you" (Matthew 6:33). [North, *Matthew*, ch. 15] Everything else is to be subordinate to this goal. It is not a goal devoid of rewards. It is specifically a goal with numerous rewards: "all these things." These rewards are not all to be enjoyed beyond the grave, but some of them will be. The more dedicated that we are to building the kingdom of God in history, the larger the percentage of those rewards that we will experience beyond history. In the meantime, if we feel that we are not receiving sufficient earthly rewards to make our lives pleasant, we should remember this: "Therefore, do not be anxious for tomorrow, for tomorrow will be anxious for itself. Each day has enough evil of its own" (v. 34). We are to be optimistic regarding our eternal future. We are therefore to be optimistic with respect to our temporal future, beginning with optimism today about tomorrow. We are not to worry about tomorrow. It takes great self-discipline not to worry about tomorrow if things are going badly today. But that is what Jesus told us to do.

A. Rival Goals, Common Strategy

To understand the difference between the two kingdoms, consider the differences between covenant-keepers and covenant-breakers who are working for the same success indicators in this life. Let us say that they are owners of the same kind of business. They both want their businesses to be profitable. They both want to avoid losses in their business. They are both confronting similar consumers. They both are operating within the same economic environment. They may not know of each other. Neither of them is praying for the failure of the other. Each of them is praying for success in his next entrepreneurial venture.

God may regard the outcome of both of their business plans as productive for consumers. Neither of them is cheating consumers. Both of them are providing services that may be beneficial to some consumers. Some of the consumers will be covenant-keepers. Some of them will be covenant-breakers. So, there is no fundamental distinction between the outcomes of the two entrepreneurial ventures. They both will lead to positive outcomes for consumers. They both will lead to profits for the two entrepreneurs.

God may favorably answer the prayers of both entrepreneurs. There is no objective difference between the outcomes of the two business plans. In both cases, consumers will be benefitted. In both cases, the entrepreneurs have developed plans that will not waste resources. Yet the results individually in the eternal lives of the two entrepreneurs will be different. One of them is a worshiper of mammon. The other is a worshiper of God. One of them seeks to accumulate wealth in this world for the sake of this world alone. The other seeks to accumulate wealth in this world, but primarily for benefitting the extension of God's kingdom in history. He will therefore accumulate wealth beyond the grave. From the point of view of his eternal condition, the first entrepreneur is heaping up coals of fire on his head (Romans 12:20). Jesus was clear about this. "That servant, having known his lord's will, and not having prepared or done according to his will, will be beaten with many blows. But the one who did not know and did what deserved a beating, he will be beaten with a few blows. But everyone who has been given much, from them much will be required, and the one who has been entrusted with much, even more will be asked" (Luke 12:47–48). [North, *Luke*, ch. 28] The successful entrepreneur who has served mammon

faithfully will receive his reward in history. The price of that reward in history will be a catastrophe in eternity.

The success indicator of monetary profit is common to both businesses. But it is misleading for the covenant-breaker. He thinks he is being successful, but his success is leading him into a disaster that will last for all eternity. He is being successful in history. He is serving his customers well. But there is more to life than serving customers well.

The person who is striving to build up the kingdom of God understands that money is a means of extending the kingdom. It is a form of capital. In order to increase his ability to extend the kingdom, he must make more money. In contrast, the covenant-breaker sees money as a tool for serving customers better. In both cases, money is capital. What is different between the two money-making entrepreneurs is this: the different uses of the money. Their money serves rival kingdoms.

The covenant-keeper wants to increase his responsibility. He wants to be a better servant of God. In the modern world, with its high division of labor, the main tool for gaining increased responsibility is money. Money is the most marketable commodity. It can be used to build the kingdom of God in many ways. The covenant-keeping entrepreneur gains increased responsibility by making money. He then has to decide the hierarchy of uses to which his money will be put in extending the kingdom of God. The greater the amount of money he earns, the greater the level of the responsibility he will have for determining the proper allocation of this money. Money is a tool. It is not an end. It is probably not an end for the covenant-breaker, either. He serves customers in history. He does not see his profits as tools for building the kingdom of God, thereby receiving rewards beyond the grave. *The main reward in eternity is this: greater responsibility*. In the parable of the stewards and the minas, we read: "The first came before him, saying, 'Lord, your mina has made ten minas more.' The nobleman said to him, 'Well done, good servant. Because you were faithful in very little, you will have authority over ten cities'" (Luke 19:16–17). [North, *Luke*, ch. 46:C] Responsibility never ends. The quest for greater responsibility never ends. Service to God never ends. The dominion covenant never ends for covenant-keepers. It defines mankind. There is always more to learn about God's relation to creation.

Conclusion: the equilibrium model for economic theory is a humanist myth. Avoid it.

B. Net Increase vs. Zero-Sum

Economists have the concept sometimes called a zero-sum game. This is a game in which the winnings of the winners are funded by the losses of the losers. There is no increase in net wealth of the group. In fact, there has to be a loss. Someone is spending time in the game. This is a loss. The players may be paying a casino to run the game. This is a loss for the players. All of this is to sustain the game.

1. Free Trade

The free market is based on the idea of voluntary cooperation. People cooperate in order to benefit themselves. It is not a zero-sum process. Both parties to a transaction may turn out to be winners. Each of them gains a profit. Each of them exchanges a less desirable set of circumstances for what he believes will be a more desirable set of circumstances. Because of this mutually beneficial arrangement, individuals can benefit through trade. Both parties to the transaction will be beneficiaries if they have estimated the outcome accurately.

So, with respect to personal outcomes in history, entrepreneurial ventures that successfully meet the demands of consumers at prices the consumers are willing and able to pay will be profitable. There will be an increase in corporate wealth. At least two people are better off because of an exchange. As long as others in the community are not driven by envy, the community will experience net benefits. No one will resent the benefits of the successful traders, and both traders will be better off. This is why the free market is a great generator of wealth for all. This is why it reduces poverty for all. It is an answer to the Lord's prayer: "Give us today our daily bread." It is a positive sanction.

Jesus taught specifically that in the competition between members of the two kingdoms, God's and mammon's, the final judgment will separate the sheep from the goats. History as a whole is something resembling a zero-sum process. The benefits that God will transfer to covenant-keepers will be paid for by the losses experienced by covenant-breakers. This is the message of the parable of the talents and the parable of the minas. Solomon had said the same thing a millennium earlier: "A good person leaves an inheritance for his grandchildren, but a sinner's wealth is stored up for the righteous person" (Proverbs 13:22). [North, *Proverbs*, ch. 41] This is the pattern

in history. It is the pattern for history.

This is why a Christian economist should affirm the benefits of free trade. These benefits accrue to both parties of the transaction. It does not matter what the covenantal status is of the two parties. Both of them will benefit from the transaction. Each of them will use his profits to worship at the altar of his king. One of them will worship the God of the Bible with his wealth. The other will worship the god of mammon with his wealth.

2. Political Envy

When a covenant-breaker accumulates wealth by efficiently serving consumers, covenant-keepers should not resent his success. To do so would be to indulge in the sin of envy. Envy is the sin of pulling down the other person merely because he is achieved something profitable in some way. Envy is a self-destructive sin. It is also an objectively destructive sin when envy becomes part of the political order. When people vote for politicians who promise to take wealth from successful people and redistribute it to the poor, despite the fact that such policies reduce economic growth and also violate the principle of private property, they are indulging in the sin of envy. They will be worse off if the people they vote for implement such a program. But they may not care. What they do care about is that rich people be pulled down.

A covenant-keeper should always bear in mind that the capital accumulated by covenant-breakers will be the lawful inheritance of covenant-keepers at the end of time. That means that the wealth of the sinners in history will be laid up for the righteous in eternity. Covenant-keepers can and should rejoice in the fact that history is a zero-sum competition. This is not the sin of envy. Covenant keepers simply acknowledge the fact that covenant breakers will have no use for their accumulated wealth in eternity. It would be unwise for this wealth to go to waste. This is especially true because wealth is increasingly produced on the basis of specialized knowledge. What possible good would it be for God to erase all traces of the technological advances that covenant-breakers have produced in history? How would that benefit the extension of the kingdom of God beyond the grave? It would not.

Because most people so far in history have been covenant-breakers, most of the discoveries and inventions that have benefitted mankind have been made by covenant-breakers. In my day, virtually all of the super rich are covenant-breakers. The total wealth of about 6,000 people in the world

is equal to the wealth owned by the bottom half of the world's population. There are far more covenant-keepers among the half of the world's population who live in poverty than there are among the superrich who control the majority of the capital assets in the world economy. Nevertheless, because of the enormous economic growth that these superrich people have supervised, there is a real possibility that there will not be starvation-level poverty in the world within one generation. This will be a tremendous benefit for those hundreds of millions of mainly rural people who are poverty-stricken covenant-keepers today, but who will not be poverty-stricken in a generation. Nor will their children be impoverished.

Political envy and state-enforced wealth redistribution would hamper the ability of the superrich to supervise the allocation of capital that has made them incomparably wealthy, but which has also increased economic growth to such an extent worldwide that starvation-level poverty is being eliminated rapidly. In the long run, meaning the long run of history, covenant-keepers will be the heirs of all of the capital of covenant-breakers. Political envy would reduce this inheritance.

C. Christian Social Continuity

There is constant competition between the two kingdoms. It is a continuity of service. The free market economy forces this on all participants. We are now seeing how the first principles of both kingdoms play out in history. The twentieth century, more than any century in history, demonstrated that the free market economy is vastly superior in its productivity to socialism and Marxian Communism. The failure of Communist Russia and Communist China, which became visible to the leaders in both nations in the final third of the twentieth century, testifies to the utter failure of central economic planning.

Jesus taught that there will be historical continuity in the future. He made this clear in His parable of the wheat and the weeds. This parable is central to Christian economic theory and Christian social theory in general. There will be no interruption in the development of Christian social policy and Christian social theory between now and the final judgment. This will manifest itself in the development of Christian economic theory and applied Christian economics in the social order. We will be able to see clearly the superiority of free-market principles, which rest covenantally on the private property order that God has demanded from the day that he

placed legal boundaries around the forbidden tree. Here is what Jesus taught about the continuity of the rival kingdoms in history.

> Jesus presented another parable to them. He said, "The kingdom of heaven is like a man who sowed good seed in his field. But while people slept, his enemy came and also sowed weeds among the wheat and then went away. When the blades sprouted and then produced their crop, then the weeds appeared also. The servants of the landowner came and said to him, 'Sir, did you not sow good seed in your field? How does it now have weeds?' He said to them, 'An enemy has done this.' The servants said to him, 'So do you want us to go and pull them out? The landowner said, 'No. Because while you are pulling out the weeds, you might uproot the wheat with them. Let both grow together until the harvest. At the time of the harvest I will say to the reapers, 'First pull out the weeds and tie them in bundles to burn them, but gather the wheat into my barn'" (Matthew 13:24–30).

The disciples did not understand this parable.

> Then Jesus left the crowds and went into the house. His disciples came to him and said, "Explain to us the parable of the weeds of the field." Jesus answered and said, "He who sows the good seed is the Son of Man. The field is the world; and the good seed, these are the sons of the kingdom. The weeds are the sons of the evil one, and the enemy who sowed them is the devil. The harvest is the end of the age, and the reapers are angels. Therefore, as the weeds are gathered up and burned with fire, so will it be at the end of the age. The Son of Man will send out his angels, and they will gather out of his kingdom all the things that cause sin and those who commit iniquity. They will throw them into the furnace of fire, where there will be weeping and grinding of teeth. Then will the righteous people shine like the sun in the kingdom of their Father. He who has ears, let him listen" (Matthew 13:36–43).

I do not see how anybody could not understand what Jesus said. He said specifically that there will be no time in which the wheat will be removed

from history. Let me spell this out. There cannot possibly be a seven-year period of tribulation in which the church has been enraptured out of history, and in which covenant-breakers will be in charge of the world order. I hope this is clear. It is not clear to those pastors and theologians who teach that there will be a seven-year tribulation or a three-and-a-half year tribulation in which the church will be removed from history.

This means one of two things. Either the church is going to go through a future tribulation, called the great tribulation, or else the great tribulation has already taken place. I argue that Jesus' forecast of the great tribulation was fulfilled with the fall of Jerusalem in A.D. 70. This is most persuasively argued by David Chilton in his books, which I published in 1987: *The Days of Vengeance: An Exposition of the Book of Revelation* and *The Great Tribulation* (1987). They are available online for free. Jesus's statement about the great tribulation appears in Luke 21. Jesus made it clear that some of His listeners should expect to see the great tribulation. "So also, when you see these things happening, you know that the kingdom of God is near. Truly I say to you, this generation will not pass away until all these things take place. Heaven and earth will pass away, but my words will never pass away" (vv. 31–33).

Paul taught that there will be a time in which this even takes place. "For the Lord himself will descend from heaven. He will come with a shout, with the voice of the archangel, and with the trumpet of God, and the dead in Christ will rise first. Then we who are alive, who are left, will together with them be caught up in the clouds to meet the Lord in the air. In this way we will always be with the Lord" (I Thessalonians 4:16–17). The eschatological debate among Christians is over when this will take place: at the end of history at the final judgment or 1,000 years before the final judgment. Premillennialists believe that this will take place 1,000 years before the final judgment. Amillennialists and postmillennialists teach that this will take place at the end of history.

There are two varieties of premillennialism: historic (originating in the early church) and dispensational (originating in the 1830s). Historic premillennialists believe that they will immediately return from the skies with Christ and rule beside him in His kingdom. Dispensational premillennialists believe that neither Christians nor Christ will immediately return from the skies. Christians will be removed from history during the period of the great tribulation. After the great tribulation, they will return with Christ to

rule over the world for 1,000 years. They will have sin-free, death-free bodies. They will be like angels. Neither position is consistent with what Jesus taught about the side-by-side progress of the kingdom of God and the kingdom of mammon until the end of time. There will never be an uprooting of the wheat in history. Jesus was clear about this. This is the only parable that Jesus ever was asked to explain by the disciples, and He explained it. We should take His explanation seriously.

Christians should expect continuity of God's kingdom in history. There will be constant competition between the kingdom of God and the kingdom of mammon. The principles of both kingdoms will be worked out in history. The results of this competition will be visible in history. The Dominion covenant will be worked out in history by mankind as a whole. It was given to mankind as a whole. We will see which of the two families is more productive: the disinherited family of covenant-breakers or the adopted family of covenant-keepers.

Amillennialists do not believe that Jesus' promise of a millennium of kingdom rule is literal. They believe that the church and its rivals will develop side-by-side. They do not believe in the eschatological possibility of a progressive extension of the kingdom of God in history as a social, economic, scientific, and political force. They do not believe in the legitimacy of the ideal of Christendom. They do not believe that the church will ever develop and then implement Christian social theory, Christian economics, and Christian politics. They would say that if a few Christians scholars ever develop such theories, Christians will never be able to implement them. Finally, they believe that if a handful of Christians do implement such theories, they will not be successful in their competition against covenant-breakers. The world will remain as it is today: dominated by covenant-breakers in every area of life. Therefore, developing such explicitly Christian theories is inherently futile. Basically, they conclude, this would be a waste of time. In other words, what I have been doing for the last six decades is inherently a waste of time.

In contrast, postmillennialists believe that Christendom is a legitimate ideal for history. They believe that the church will, through competition and through the explicit blessings of God, extend Christian principles institutionally across the face of the earth. They will achieve this before the end of time. Postmillennialists have an optimistic outlook toward the development of Christian principles and Christian institutions. They believe that,

in the competition between the two kingdoms, the kingdom of God will prove to be more competitive than the kingdom of mammon.

Conclusion

Karl Marx was wrong. "The history of all hitherto existing society is the history of class struggles." He announced this in the opening sentence of *The Communist Manifesto* (1848). In contrast, Jesus taught that the history of all hitherto existing society is the conflict between the kingdom of God vs. the kingdom of mammon. The kingdom of mammon is the kingdom of self-proclaimed autonomous man. These two kingdoms cannot be reconciled theologically. They can and will compete for the allegiance of men until the end of time.

The two kingdoms have rival principles of sovereignty, authority, law, sanctions, and time. In other words, they are committed to rival covenants. The competition of the two kingdoms begins with theology. The fundamental debate is over who is sovereign: the Trinitarian God of the Bible or man. Christianity ever since the Council of Nicaea in 325 has held to the Trinitarian position. But Christians have borrowed heavily from non-Christians with respect to the issues of authority, law, sanctions, and history. The issues have not always been clear. But, over time, these issues become more clear. Each side will become more consistent in its understanding of its first principles, and each side will become more consistent in the implementation of these principles. This was Cornelius Van Til's position. It was also C. S. Lewis' position. He had the character who was most like himself in his novel, *That Hideous Strength* (1945), make this announcement. "If you dip into any college, or school, or parish, or family—anything you like—at a given point in its history, you always find that there was a time before that point when there was more elbow room and contrasts weren't quite so sharp; and that there's going to be a time after that point when there is even less room for indecision and choices are even more momentous. Good is always getting better and bad is always getting worse: the possibilities of even apparent neutrality are always diminishing. The whole thing is sorting itself out all the time, coming to a point, getting sharper and harder." My work on Christian economics is my attempt to get things sharper and harder. I mean harder in the sense of harder to reconcile with humanistic economic theory, not harder to understand. I hope that my books are fairly easy to understand. I also hope that they are harder to reconcile with non-Christian economics.

44

LORD'S DAY

Remember the Sabbath day, to set it apart to me. You must labor and do all your work for six days. But the seventh day is a Sabbath for the Lord your God. On it you must not do any work, you, or your son, or your daughter, or your male servant, or your female servant, or your cattle, or the foreigner who is within your gates. For in six days the Lord made the heavens and earth, the sea, and everything that is in them, and rested on the seventh day. Therefore the Lord blessed the Sabbath day and set it apart (Exodus 20:8–11).

One person values one day above another. Another values every day equally. Let each person be convinced in his own mind (Romans 14:5).

So then, let no one judge you in eating or in drinking, or about a feast day or a new moon, or about Sabbath days (Colossians 2:16).

Analysis

Exodus 20 contains the Ten Commandments. The fourth commandment is the commandment not to work on the seventh day of the week. The reason given was that God created the cosmos in six days. He rested on the seventh day. The parallel list of ten was given by Moses to the generation of the conquest four decades later. The reason offered for the sabbath was different. "You will call to mind that you were a servant in the land of Egypt, and the Lord your God brought you out from there by a mighty hand and by an outstretched arm. Therefore the Lord your God has commanded you to keep the Sabbath day" (Deuteronomy 5:15). These reasons constituted a pair: creation and deliverance. This is consistent with the New Testament's identification of the Creator as the Second Person of the Trinity, God's Son, and the Redeemer/Deliverer as Jesus Christ, God's Son.

The New Testament does not specify which day of the week is the Lord's day, a day of rest. The early church identified this as the first day of

the week. This was in the second century. Justin, sometimes called Justin Martyr, in his *First Apology*, wrote this of the day of worship. "And we afterwards continually remind each other of these things. And the wealthy among us help the needy; and we always keep together; and for all things wherewith we are supplied, we bless the Maker of all through His Son Jesus Christ, and through the Holy Ghost. And on the day called Sunday, all who live in cities or in the country gather together to one place, and the memoirs of the apostles or the writings of the prophets are read, as long as time permits; then, when the reader has ceased, the president verbally instructs, and exhorts to the imitation of these good things." The members then took communion: the Lord's Supper. Donated money was then given to widows and orphans "who, through sickness or any other cause, are in want, and those who are in bonds and the strangers sojourning among us, and in a word takes care of all who are in need. But Sunday is the day on which we all hold our common assembly, because it is the first day on which God, having wrought a change in the darkness and matter, made the world; and Jesus Christ our Saviour on the same day rose from the dead. For He was crucified on the day before that of Saturn (Saturday); and on the day after that of Saturn, which is the day of the Sun, having appeared to His apostles and disciples, He taught them these things, which we have submitted to you also for your consideration" (Chapter 67). So, we see a break with the Mosaic law with respect to sabbath observance: from day seven to day one.

There was another change: the negative sanction for not obeying the sabbath. The Mosaic sanction was execution. "Then the Lord spoke to Moses and said, 'Tell the Israelites: "You must certainly keep the Lord's Sabbath days, for these will be a sign between him and you throughout your people's generations so that you may know that he is the Lord, who sets you apart for himself. So you must keep the Sabbath, for it must be treated by you as holy, reserved for him. Everyone who defiles it must surely be put to death. Whoever works on the Sabbath, that person must surely be cut off from his people. Work will be done for six days, but the seventh day is to be a Sabbath of complete rest, holy before the Lord. Whoever does any work on the Sabbath day must surely be put to death. Therefore the Israelites must keep the Sabbath. They must observe it throughout their people's generations as a permanent law. The Sabbath will always be a sign between the Lord and the Israelites, for in six days the Lord made heaven and earth, and on the sev-

enth day he rested and was refreshed'" (Exodus 31:12–17). This sanction was imposed at God's command in Numbers 15.

The church has never argued that the correct sanction is execution. *There has been a fundamental theological break between the Mosaic law in what is called the Lord's day.* The problem is this: theologians have not developed an explicit theology of this transition between the sabbath of the Hebrews and the Lord's day of the Christians. There have been strict sabbatarians in the history of the church, especially in the tradition of Scottish Presbyterianism and Puritan New England Congregationalism in the seventeenth century. Scottish Presbyterians remained strict sabbatarians, meaning more strict than other ecclesiastical traditions, well into the twentieth century. But they found that fewer and fewer members would abide by the requirements, and there were fewer and fewer explicitly Calvinistic Scottish Presbyterian churches. The tradition of strict sabbatarianism faded away in the British Isles in the second half of the nineteenth century.

I dealt with these issues in my 1986 book, *The Sinai Strategy: Economics and the Ten Commandments*. I devoted Chapter 4 and Appendix A to the sabbath. I reprinted them in the 2012 edition: *Authority and Dominion*, Volume 2, *Decalogue and Dominion*, Chapter 24, and Volume 5, Appendix E: "The Economic Implications of The Sabbath." If you are serious about exploring the theological and economic implications of the differences between the Sabbath law and the laws governing the Lord's Day, I recommend that you read these chapters.

I argue in favor of a discontinuity between the Mosaic law and Christian law. The fundamental discontinuity is this: *the locus of enforcement*. Under the Mosaic law, the civil government had the authority and the responsibility to impose the negative sanction of execution on Sabbath breakers. The New Testament does not lodge this authority in any institution. Why not? Theologically speaking, the answer should be clear: Paul's clear announcement of a radical transformation in the locus of sovereignty. "One person values one day above another. Another values every day equally. Let each person be convinced in his own mind" (Romans 14:5). [North, *Romans*, ch. 14] "So then, let no one judge you in eating or in drinking, or about a feast day or a new moon, or about Sabbath days" (Colossians 2:16). Theologically speaking, these are the only two statements in the New Testament that justify a break in judicial continuity between the Mosaic Sabbath and the church's Lord's Day. This was a major discontinuity.

This discontinuity did not annul the principle of one day of rest in seven. With only a few minor exceptions in history, Christian theologians have acknowledged the legitimacy of a day of rest. Almost all of them have acknowledged that this day of rest is called Sunday in the Roman calendar. This is the first day of the week for Christians. They do not honor the explicit law of the Mosaic sabbath: day seven. This has to do with the nature of Adam's rebellion in the nature of Christ's redemption. Justin hinted at it: Christ was resurrected in the day after the Jewish sabbath. This is the symbolic eighth day of deliverance.

God in his sovereignty created the world in six days. Then He rested on the seventh day. Man was to do the same. If the rebellion took place on the seventh day, when God was absent from the garden, as I think it did, this was an opportunity for Adam to announce that he was autonomous from God. He would also be a creator on his first full day of life. He would not rest as a subordinate to God. He would not rest content with the capital which God had provided him. He would imitate God as a creator. For this, he was brought under negative sanctions.

One of the sanctions was that he would have to work for six days before gaining his rest, just as God had. That sanction was removed by Christ at the resurrection. Covenant-keepers can now safely rest on the first day of the week, confident that their efforts will be successful over the next six days.

A. Salvation by Grace

Paul announced the doctrine that men are not saved by works, but rather by grace. This was the central theme of his theology. "For by grace you have been saved through faith, and this did not come from you, it is the gift of God, not from works and so no one may boast. For we are God's workmanship, created in Christ Jesus to do good deeds that God planned long ago for us, so that we would walk in them" (Ephesians 2:8–10). This has to do with the salvation of souls. But the principle also applies to the salvation, or healing, or redemption of society. *Grace preceeds law.* The day of rest precedes the day of work. The church's one-six week reflects this doctrine.

Covenant-keepers acknowledge that they are not originally sovereign. They are derivatively sovereign. They possess lawful authority, but only because God has transferred this general authority to mankind through the dominion covenant. Because covenant-keepers have been adopted by grace

into the family of God, they are now responsible for the extension of the kingdom of God in history. This extension of God's kingdom in history is the means by which God's redemptive process is extended to the institutions of society. God's redemption is comprehensive. It is not limited merely to individual souls, Christian families, and Christian churches. It involves the whole of society. This is a gigantic task. It involves a willingness on the part of covenant-keepers to accept this responsibility.

To remind them on a weekly basis that they are not autonomous, and that they are not the source of the redemption of the world, there is a day of rest. The day of rest has the same function in New Testament times that it did in Old Testament times. It reminds men that it is not within their power to redeem the world. They are enabled to work out their salvation with fear and trembling, as Paul put it (Philippians 2:12), but only because their salvation has been granted to them by God's grace. [North, *Epistles*, ch. 20] They are working out what was a gift. *Grace preceeds law.* The structure of the Christian week reflects this arrangement.

The person who believes that all of his success is the work of his hands is a person who cannot rest free of charge. If he rests, he loses work time. He loses whatever productivity might have been generated by his labor. This imposes a cost on him. If he takes a day off, he must pay for it by forfeited output, which also means forfeited income. He must pay for every moment of rest that he takes. This is not true of a covenant-keeper. The covenant-keeper becomes the beneficiary of his own willingness to acknowledge that the power of his own hands is not the source of his wealth. This is the central teaching of Christian social theory, as I have repeatedly argued. Moses warned the generation of the conquest: "He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:16–18). [North, *Deuteronomy*, ch. 22] This means that honoring the day of rest does not deplete the capital assets of the covenant-keeper. On the contrary, it is one of two ritual sacrifices that enable him to extend his dominion, thereby increasing his responsibility, thereby increasing his wealth. The other foundation is the tithe. It takes faith to understand this. It takes faith to abide by this. But this is how cove-

nant-keepers acknowledge ritually before God that they are not autonomous, and therefore they are not the source of their wealth.

B. The Meaning of Rest

The primary meaning of rest is spiritual. A secondary meaning of rest is eschatological. The fourth chapter of the epistle to the Hebrews is devoted to the eschatological issue of rest. God promised rest to the Israelites, but they did not achieve it. "Therefore, because it is still reserved for some to enter his rest, and since many Israelites who heard the good news did not enter it because of disobedience, God has again set a certain day calling it 'Today.' After many days, he spoke through David, as it was earlier said, 'Today if you hear his voice, do not harden your hearts'" (Hebrews 4:6–7). Rest lies ahead of us. "For if Joshua had given them rest, God would not have spoken about another day. Therefore there is still a Sabbath rest reserved for God's people. For he who enters into God's rest has himself also rested from his deeds, just as God did from his. Therefore let us be eager to enter that rest, so that no one will fall into the kind of disobedience that they did" (Hebrews 4:8–11). We are to acknowledge ritually our commitment of faith in that coming eschatological rest beyond the grave and then in the new heavens and new earth. We do this by taking one day off per week.

The nature of this rest will be redeemed labor. This will be the result of the removal of the curse on mankind and also the creation. Paul wrote of the eschatological liberation that awaits the creation. "For the eager expectation of the creation waits for the revealing of the sons of God. For the creation was subjected to futility, not of its own will, but because of him who subjected it, in the certain hope that the creation itself will be delivered from slavery to decay, and that it will be brought into the freedom of the glory of the children of God. For we know that the whole creation groans and labors in pain together even now" (Romans 8:19–22). [North, *Romans*, ch. 5] Labor in the world beyond the grave will reflect the one-six pattern of the Christian week. It will begin with the rest, but work will not be cursed, unlike the situation in the post-fall world.

The day of rest for the covenant-keeper today should be manifested above all by confidence regarding the outcome of this day of rest. The day of rest reminds us that we must not waste time in the six days that follow. We should become more efficient. We should be better managers of the capital

that God has entrusted to us, including the capital of time. But, once we have done this, we can rest in confidence. We can rely on God as the God of positive sanctions in history.

The Mosaic covenant's weekly sabbath laws focused entirely on the day of rest. The law did not discuss mandatory worship. We know virtually nothing about mandatory worship under the Mosaic covenant, other than the required annual festivals. The synagogue system appeared after the Israelites' return from captivity. There is evidence of the system in the third century B.C. But we do not know if Israelites worshiped weekly on the sabbath prior to the Assyrian and Babylonian captivities. In contrast, the New Testament inaugurated the system in which people worshiped together on the first day of the week. The book of Acts records this meeting of Paul and church members in the city of Troas. "On the first day of the week, when we were gathered together to break bread, Paul spoke to the believers. He was planning to leave the next day, so he kept speaking until midnight" (Acts 20:7). Paul wrote to the church at Corinth that the members should gather together on the first day of the week to collect the money that the church had promised to donate to the church at Jerusalem. "Now concerning the collection for the believers, as I directed the churches of Galatia, so you are to do. On the first day of the week, each of you is to put something aside and store it up as you are able. Do this so that there will be no collections when I come" (I Corinthians 16:1–2). The focus of the gentile New Testament church from the beginning was on worship on the Lord's day, not rest. This continued in the early church up until the time of Constantine.

C. Businesses Are Not Individuals

Prior to the Industrial Revolution, the one-six pattern of living was easier to maintain. There were no public utilities. There were no steel mills that must not be shut down. There were certain tasks that had to be conducted, such as milking cows. But society was not threatened with paralysis in rural areas if people honored the day of rest every Sunday. Yet there was work to be done. People had to walk to their churches or they had to hitch up their buggies and drive to church. After the invention of the coal stove in the second half of the eighteenth century, somebody had to start the fire in the winter. Those who defended a strict Sabbath always were able to find ways of redefining such labor as either mandatory and therefore legitimate, or else aspects of charity and therefore legitimate.

With the coming of urban life, it became necessary for strict sabbatarians to begin to redefine legitimate labor in terms of a constant supply of services that are basic to society. With the development of the railroad after 1830, strict sabbatarians in Great Britain unsuccessfully pressured the government to outlaw Sunday sightseeing tours that were profitable for the railroad companies. But by the end of the nineteenth century, all such criticism either fell on deaf ears or else disappeared.

Restaurants have remained targets of strict Sabbatarians. Families are not supposed to attend restaurants on Sundays. Yet what we find is that during the two hours after church services in those sections of the country that have large church attendance, restaurants fill up. Churchgoers feel no compunction about going out to eat on Sunday afternoon. The wives get a rest. Their husbands pay money to the restaurants for providing this break in the work week of wives.

There is a distinction economically between a business that stays open seven days a week and an employee who is required by the employer to work seven days a week. The Old Testament did not allow businesses to remain open on the sabbath (Nehemiah 13:19–22). Churches have not enforced such a requirement. But an employee should not be required to work seven days a week. He should not accept a job that requires him to do this. He is breaking the pattern of the Lord's day. Even if he is given days off to make up for the break in the sabbatical pattern, he should not accept the job.

The New Testament speaks of the Lord's day. "I, John—your brother and the one who shares with you in the suffering and kingdom and patient endurance that are in Jesus—was on the island called Patmos because of the word of God and the testimony about Jesus. I was in the Spirit on the Lord's day. I heard behind me a loud voice like a trumpet" (Revelation 1:9–10). It is a day of worship. It is not spoken of as a day of rest. It is a special day. An individual has the right to take full responsibility for his behavior on the Lord's day. We should take seriously Paul's injunction. *The locus of enforcement authority has been transferred by God to the individual*. But church officers should remind men or women who constantly violate the one-six pattern of the Christian work week that such behavior is not pleasing to God. Christians are supposed to worship together on Sundays. "Let us not stop meeting together, as some have done. Instead, encourage one another more and more, and all the more as you see the day coming closer" (Hebrews 10:25). The fact that no negative sanctions are brought against them

is not the same as saying that no warnings should be issued. God will eventually bring the sanctions. People should be warned about this. To break the pattern of the Christian week is to assert autonomy from God.

D. Mosaic Israel's Sabbatical Year

There was a unique law that applied only to Mosaic Israel. It did not exist under the patriarchs. It appears in Leviticus 25, the chapter on what is known as the Jubilee year.

> The Lord spoke to Moses on Mount Sinai, saying, "Speak to the people of Israel and say to them, 'When you come into the land that I give you, then the land must be made to keep a Sabbath for the Lord. You must plant your field for six years, and for six years you must prune your vineyard and gather the produce. But in the seventh year, a Sabbath of solemn rest for the land must be observed, a Sabbath for the Lord. You must not plant your field or prune your vineyard. You must not conduct an organized harvest of whatever grows by itself, and you must not conduct an organized harvest of whatever grapes grow on your unpruned vines. This will be a year of solemn rest for the land. Whatever the unworked land grows during the Sabbath year will be food for you. You, your male and female servants, your hired servants and the foreigners who live with you may gather food, and your livestock and also wild animals may eat whatever the land produces'" (Leviticus 25:1–7).

This law was never enforced. We know this because Jeremiah told the people of Judah that the reason God was going to send them into captivity was to give the land of Israel its rest. "The king carried away to Babylon those who had escaped the sword. They became servants for him and his sons until the rule of the kingdom of Persia. This happened to fulfill the word of the Lord by the mouth of Jeremiah, until the land should have enjoyed its Sabbath rests. It observed its Sabbath for as long as it lay abandoned, in order to pass seventy years in this way" (II Chronicles 36:20–21). That was the fulfilment of Moses' warning: "I will scatter you among the nations, and I will draw out my sword and follow you. Your land will be abandoned, and your cities will be ruined. Then the land will enjoy its Sabbaths for as long as it lies abandoned and you are in your enemies' lands.

During that time, the land will rest and enjoy its Sabbaths" (Leviticus 26:33–34).

The six-one pattern of the Jewish week required that families store up wood during the week so they would not have to start a fire on the Sabbath. It was illegal to start a fire on the sabbath. Similarly, had this law been enforced, families would have had to save up food, meaning seeds and grain, for six years in preparation for the seventh year of rest for the land. The Sabbath forced future-orientation on the people of Israel. It forced a program of thrift on them.

Deuteronomy 15:1–6 set forth a law that all bondservants who were serving because of their failure to repay an interest-free charitable loan had to be released in the seventh year. All loans, meaning charitable loans, had to be forgiven in that year. This was a year of release from bondage, including the bondage of debt. The law also mandated an ethical requirement. Someone who wanted to borrow money was not to be turned down simply because the year of release was approaching (Deuteronomy 15:7–10). [North, *Deuteronomy*, ch. 36]

These laws did not exist prior to God's gift of the land to the nation. They were part of the land laws of Israel. Leviticus 25:8–13 specified that in year 49, meaning the seventh of seven sabbatical years, land that had been owned by non-Levitical families at the time of the conquest must be returned to those families. This did not apply to housing inside walled cities. It only applied to rural land. [North, *Leviticus*, ch. 24]

These laws disappeared after the Israelites returned to the land after the years of exile. This had been predicted by the prophet Ezekiel. "In this way you will divide this land for yourselves, for the tribes of Israel. So you will distribute the inheritances for yourselves and for the foreigners in your midst, those who have given birth to children in your midst and who are, with you, like the native born people of Israel. You will cast lots for inheritances among the tribes of Israel. Then it will happen that the foreigner will be with the tribe among whom he is living. You must give him an inheritance—this is the Lord's declaration" (Ezekiel 47:21–23). [North, *Prophets*, ch. 22] That ended the Jubilee year laws. It clearly ended the sabbatical year, because the foreigners were not Israelites. The nation after the captivity was never again ruled by Israelites. It was ruled by a series of empires: Medo-Persian, Greek, and Roman. They did not honor the land laws that Moses had revealed to the people.

Conclusion

The Israelite sabbath was different from the church's Lord's day. The Israelite sabbath was focused exclusively on rest. The Christian church's Lord's day is focused on both rest and worship. There is nothing in the New Testament that specifically prohibits work on the first day of the week. What was required was worship, but even in this case, it was the Greek churches that honored this requirement. There is no indication that, in the Jerusalem church, Christians avoided work on the Lord's day. They avoided work on the Israelite sabbath because they were still participants in the synagogue and temple system. They did not take two days a week off for rest.

The day of rest is a way for covenant-keepers to acknowledge that they are not autonomous. They do not imitate God. God worked for six days, and He rested on the seventh day. God's seventh day, meaning man's first day, was supposed to have been a day of rest for Adam, but he sinned on that day. So, God's eighth day has become man's first day covenantally, meaning the day after the day of rebellion. It has become the day of rest for Christians. It is symbolically the eighth day. In terms of the structure of God's week, it is the first day for man. Man's first day was the day that Adam should have rested. Instead, he stole from God's tree, and then he labored to make fig leaves for himself to cover his sin. So did his wife. They should have eaten from the tree of life to celebrate their initial day of rest. Their communion meal would have gained them eternal life. That would have ended the test of the tree of knowledge of good and evil, because it would have ended the threat of the negative sanction associated with the tree: death. Christ's resurrection on the day after the seventh day made it the first day of the week.

The Lord's day reminds covenant-keepers that God is the source of their wealth. Therefore, they do not lose wealth by honoring the Lord's day requirement that they do not work at their income-producing jobs. In contrast, covenant-breakers regard a day of rest as a day of loss. They lose the income that they could have earned. This outlook is a curse of autonomy. They believe that they are the source of their wealth (Deuteronomy 8:17), and therefore when they rest from profit-seeking enterprises and salaried jobs, they must forfeit the income that their labor would have produced. They do not see the day of rest as obedience to God. They do not believe that obedience to God's law brings wealth. They do not see economic cause and

effect as governed by biblical law and enforced by a sovereign God. So, they pay twice. First, they do not enjoy God's gift of rest. Second, they do not enjoy the blessings that they would have enjoyed, had they obeyed God's law governing the Lord's day.

In the modern world, where two days off per week is normal, covenant-breakers who are salaried enjoy both days off. They receive the same salary even though they do not work seven days a week. They do not understand that, if they negotiated to work seven days a week, they could gain larger salaries. Instead, they take their income in the form of leisure, which is not taxable. They are political supporters of additional holidays at their employers' expense. They approve it when national governments add an extra day off in the year. This is a way to redistribute wealth from their employers, especially if their employer is the national government.

The enforcement of the Lord's day prohibition against work is self-enforcement. Paul made this clear. It is not a matter of civil law. It is not a matter of ecclesiastical law. Therefore, the attempt of civil governments to restrict certain activities on Sundays is a violation of Paul's express announcement regarding self-enforcement. Observance is a matter of conscience, not legality.

In Great Britain during the nineteenth century, there were attempts by sabbatarian Christians to gain political support for legislated restrictions on certain kinds of activities. A book on these efforts is John Wiggan's *The Rise and Fall of Victorian Sunday* (1980). I discuss this book at length in Volume 5 of *Authority and Dominion*, Appendix E: "The Economic Implications of The Sabbath." By the end of the nineteenth century, most of these laws were no longer enforced. Public opinion had changed. Modern industrial production had made such restrictions economically destructive. The division of labor that is required to sustain a modern economy does not allow a day of interruption every week for many industries. These attempts had always been theologically misguided. By the end of the 1800s, they were no longer taken seriously by politicians.

45

THE TITHE

Would a person rob God? Yet you are robbing me. But you say, "How have we robbed you?" In tithes and offerings. You are cursed with a curse, for you are robbing me, the whole nation. Bring the full tithe into the storehouse, so that there may be food in my house, and test me now in this," says the Lord of hosts, "if I do not open to you the windows of heaven and pour out a blessing on you, until there is no more room for it all" (Malachi 3:8–10).

The sons of Levi who receive the priesthood have a command from the law to collect tithes from the people, that is, from their brothers, even though they, too, have come from Abraham's body. But Melchizedek, whose descent was not traced from them, received tithes from Abraham, and blessed him, the one who had the promises. There is no denying that the lesser person is blessed by the greater person. In this case, mortal men receive tithes, but in that case it is testified that he lives on. And, in a manner of speaking, Levi, who received tithes, also paid tithes through Abraham, because Levi was in the body of his ancestor when Melchizedek met Abraham (Hebrews 7:5–10).

Analysis

A tithe is a payment of 10% of net income, after deductions for capital expenditures. The Mosaic laws of the tithe are found in Numbers 18. [North, *Numbers*, ch. 10] "To the descendants of Levi, look, I have given all the tithes in Israel as their inheritance in return for the service that they provide in working at the tent of meeting" (Numbers 18:21). The Levites had no inheritance of land. This was a substitute. It was a payment of one-tenth of the produce of everyone else's land. They in turn had to pay one-tenth to the temple of whatever they received in tithes. "The Lord spoke to Moses and said, 'You must speak to the Levites and say to them, "When you receive

from the people of Israel the tenth that I have given to you from them for your inheritance, you will present a contribution from it to the Lord, a tenth of the tithe. Your contribution must be considered by you as if it were a tenth of the grain from the threshing floor or of the production from the winepress'" (Numbers 18:25–27). There is no indication that the tithe was paid by businessman who were town dwellers. It was a tax on the land to compensate the Levites for having no inheritance of land.

1. A Priestly Payment

The tithe is uniquely priestly. In the Old Covenant, the tithe was paid to a higher priest by a lower priest. The first recorded instance of a tithe is in Genesis 14. Abram made a tithe payment to Melchizedek, the priest of the most high God. This is the first reference in Scripture of the office of priest. First, Melchizedek presented bread and wine to Abram (v. 18). This was clearly a sacramental meal, since he presented it as a priest. The meal had to do with covenantal sanctions: point four of the biblical covenant model. Second, he blessed Abram, identifying Abram as also being of the most high God (v. 19). This blessing had to do with covenantal sanctions. Third, he blessed God, who had delivered Abram's enemies into his hand (v. 20). Again, this was point four: sanctions. In response, Abram paid Melchizedek a tithe of the spoils that he had taken as a result of his defeat of Chedorlaomer's army (v. 20): sanctions.

The tithe is an aspect of point two—ecclesiastical hierarchy—and point four: ecclesiastical sanctions. Abram's tithe to Melchizedek began a series of covenantal events that established Israel as a kingdom of priests (Exodus 19:6).

Beginning with Abram's tithe to Melchizedek, the priestly office has been associated with inheritance. In the chapter following the introduction of the tithe, Abram asked for an heir. Inheritance is point five of the biblical covenant model, as it applies to family government. God promised him that his heirs will be numerous and would inherit the land. To seal this promise, God required Abram to sacrifice animals: a priestly act (Genesis 15:9–10). This covenant had to do with family inheritance: the land of Canaan (Genesis 15:16–18). [North, *Genesis*, ch. 23]

2. An Inheritance

In Genesis 17, God renewed this covenant with Abram (high father),

changing his name to Abraham (father of nations). This renewed covenant reasserted the inheritance established by the first covenant: God's covenantal vow to Abram (Genesis 17:7–8). To mark this covenant, God required Abraham to perform circumcisions on every male in his household, including servants (Genesis 17:10). Circumcision was a priestly task: a sacrament. Abraham became a household priest (Genesis 17:27). This priestly act would continue for as long as the Old Covenant did. Circumcision was a formal act of covenant renewal.

The next reference to the payment of a tenth came when Jacob was fleeing from Esau, after their father had given the inheritance to Jacob through his blessing. This blessing was comprehensive. Isaac had said: "May God give you a portion of the dew of heaven, a portion of the fatness of the earth, and plenty of grain and new wine. May peoples serve you and nations bow down to you. Be master over your brothers, and may your mother's sons bow down to you.

May every one who curses you be cursed; may every one who blesses you be blessed" (Genesis 27:28–29). Jacob was on the run. He was no longer inside the Promised Land. He was no longer under his father's jurisdiction as the household priest who had circumcised him. He was no longer set apart (holy) either familistically or ecclesiastically. He had dreamed a supernatural dream in which he had been elevated to heaven. There, God reconfirmed His covenant with Jacob: *covenant renewal*. It was marked by God's vow: inheritance (Genesis 28:12–15). Jacob then confirmed this oath as God's vassal by stating his understanding of its terms. He also added a stipulation: a tithe. "Jacob vowed a vow, saying, 'If God will be with me and will protect me on this road on which I am walking, and will give me bread to eat, and clothes to wear, so that I return safely to my father's house, then the Lord will be my God. Then this stone that I have set up as a pillar will be a sacred stone. From everything that you give me, I will surely give a tenth back to you" (Genesis 28:20-22). Jacob promised to pay a tithe. Why did he make this promise? Because he was no longer under the jurisdiction of his father, the priest of his family: the agent of circumcision. He had not owed a tithe to Isaac while he was under Isaac's jurisdiction. Why not? Because Isaac was the family priest. Isaac in turn paid no tithe, because there was no priest above him. [North, *Genesis*, ch. 29:A]

Jacob was now out from under his father's jurisdiction. He would owe a tithe on the net increase of anything he earned outside this jurisdiction. But

to whom would he pay it? Not to some priest outside the covenant line of Abraham. Then to whom? To Isaac, upon Jacob's return to the family's land. As a household priest, which he had not been before, he owed his tithe to a higher priest. Isaac was that priest.

The text in Malachi is clear: a refusal to pay the tithe is stealing from God. "Would a person rob God? Yet you are robbing me. But you say, "How have we robbed you?" In tithes and offerings. You are cursed with a curse, for you are robbing me, the whole nation. Bring the full tithe into the storehouse, so that there may be food in my house, and test me now in this," says the Lord of hosts, "if I do not open to you the windows of heaven and pour out a blessing on you, until there is no more room for it all" (Malachi 3:8–10). There are no qualifications. If you do not pay your tithe, you are a thief. This is simple. It is straightforward. It is unarguable.

A. A Kingdom of Priests

The Mosaic system of tithing applied inside the Promised Land. It was an aspect of hierarchy: lower priests to higher priests. It was an aspect of ecclesiastical sanctions: sacramental meals, which were associated with the tabernacle. It was an aspect of political decentralization: tribal control over specific regions. It was an aspect of common instruction: a priestly tribe separated from the others through geographical dispersion.What distinguished the Levite was his non-membership in the other tribes. He was not part of their inheritance. The Mosaic law's tithes were tied to inheritance.

The tithe before the exile of Israel and Judah was based on the tribal system of inheritance of rural land. Families that were heirs of the conquest generation inherited rural land. Levites had no inheritance in rural land. They inherited the tithe of the net output of rural land. There is no evidence that the tribes reclaimed their original land after the exile. Samaritans—foreigners brought in by Assyria and Babylon—now occupied these lands. They were not evicted by the kings who ruled the succeeding empires: Medo-Persian, Alexandrian, and Roman.

Only 341 non-priestly Levites returned with Zerubbabel (Ezra 2:40–54). In contrast, 4,289 priests returned (Ezra 2:36–39). As Levites, the priests received income from the farming population. The language of Malachi in the passage with which I began this article refers only to the fruit of the ground (Malachi 3:8–12). The tithe was still agricultural, as far as the post-exilic texts indicate. Operationally speaking, this tithe came directly

to the priests as Levites, because there were so few non-Levitical priests. The nation still tithed to the Levites as Levites. "We will bring the first of our dough and our grain offerings, and the fruit of every tree, and the new wine and the oil we will bring to the priests, to the storerooms of the house of our God. We will bring to the Levites the tithes from our soil because the Levites collect the tithes in all the towns where we work" (Nehemiah 10:37). [North, *Historical Books*, ch. 41]

B. The Rabbinic Tithe

Jesus did not mince words when He dealt with the scribes and Pharisees. This was surely the case in His accusation against them with respect to their commitment to tithing. "Woe to you, scribes and Pharisees, hypocrites! For you tithe mint and dill and cumin, but you have left undone the weightier matters of the law—justice and mercy and faith. But these you ought to have done and not to have left the other undone. You blind guides, you who strain out a gnat but swallow a camel!" (Matthew 23:23–24). The key words for the purposes of this exposition are these: "these you ought to have done and not to have left the other undone." What did He mean, "these"? This: "the weightier matters of the law—justice and mercy and faith." Then what was "the other"? The tithe of mint and dill and cumin. The leaders of Israel still tithed on whatever they grew agriculturally. They were careful to tithe on the herbs and spices. They did not try to short-change the Levites or the priests.

The New Testament does not mention this, but the Sadducees were the temple priests in Jesus' era. The Pharisees were the main rival faction. The Pharisees were careful to pay their tithes to the Levitical priests, despite the fact that this was a rival faction. They adhered to the letter of the law. Jesus recognized this. He did not fault them on this. He challenged them to adhere to the weightier matters of the law, judgment, mercy, and faith.

C. The Christian Tithe

The central theme of the Book of Hebrews is the ascension of Jesus Christ to the right hand of God. Jesus Christ was the true high priest in history. "So it was necessary for him to become like his brothers in all ways, so that he would be a merciful and faithful high priest in relation to the things of God, and so that he would bring about the pardon of the people's sins. Because Jesus himself has suffered and was tempted, he is able to help those who are tempted.

Therefore, holy brothers, you share in a heavenly calling. Think about Jesus, the apostle and high priest of our confession" (Hebrews 2:17–3:1). [North, *Epistles*, ch. 29] He is the high priest in heaven. "Therefore, since we have a great high priest who has passed through the heavens, Jesus the Son of God, let us firmly hold to our beliefs" (Hebrews 4:14). He is not a Levitical priest. He is a Melchizedekian high priest. "He was designated by God as high priest after the manner of Melchizedek" (Hebrews 5:10). "It was this Melchizedek, king of Salem, priest of God Most High, who met Abraham returning from the slaughter of the kings and blessed him. It was to him that Abraham gave a tenth of everything. His name 'Melchizedek' means 'king of righteousness.' His other title is 'king of Salem,' that is, 'king of peace'" (Hebrews 7:1–2).

The principle of the tithe was established by Melchizedek. He possessed ecclesiastical authority over Abram. Only when Abram acknowledged this by paying a tithe of his gains under Melchizedek's jurisdiction (Genesis 14) did God make Abram a household priest by covenant (Genesis 17). The future lower priest tithed to the high priest. Christians are the heirs of the Israelites as the kingdom of priests. Peter declared: "But you are a chosen people, a royal priesthood, a holy nation, a people for God's possession, so that you would announce the wonderful actions of the one who called you out from darkness into his marvelous light. Once you were not a people, but now you are the people of God. You did not receive mercy, but now you have received mercy" (I Peter 2:9–10).

The kingdom of priests under the Mosaic law was confessional and sacramental: citizens of Israel by profession of faith and by the sacraments. Here was the profession of faith: "Listen, Israel: the Lord our God is one. You will love the Lord your God with all your heart, with all your soul, and with all your might" (Deuteronomy 6:4–5). The sacraments were circumcision and Passover. The kingdom of priests under the New Covenant is also confessional and sacramental: citizens of the Israel of God, the church (Galatians 6:16), by profession of faith and by the sacraments. Here is the confession. "For if with your mouth you acknowledge Jesus as Lord, and believe in your heart that God raised him from the dead, you will be saved. For with the heart man believes for righteousness, and with the mouth he acknowledges for salvation" (Romans 10:9–10). The sacraments are baptism and the Lord's Supper.

A kingdom of priests is marked by tithing: from lower priests to higher priests. To whom should Christians tithe as members of this kingdom?

There are no Levites: a tribe set aside to defend the temple from trespassing and to sacrifice animals to placate God's wrath. There is only the functional-judicial equivalent of the tabernacle-temple, where the high priest Jesus Christ resides judicially: the institutional church, which administers the sacraments of bread and wine to members of God's royal priesthood, just as Melchizedek did.

Covenantally, by family representation, Levi paid his tithe through Abraham to a superior priest. "But Melchizedek, whose descent was not traced from them, received tithes from Abraham, and blessed him, the one who had the promises. There is no denying that the lesser person is blessed by the greater person. In this case, mortal men receive tithes, but in that case it is testified that he lives on. And, in a manner of speaking, Levi, who received tithes, also paid tithes through Abraham, because Levi was in the body of his ancestor when Melchizedek met Abraham. Now if perfection were possible through the Levitical priesthood (for under it the people received the law), what further need would there have been for another priest to arise after the manner of Melchizedek, and not be considered to be after the manner of Aaron?" (Hebrews 7:6–11).

The new law of the tithe is that Christians must pay their tithes to the local church, as the ecclesiastical representative (point two) of the high priest. They are under a hierarchy (point two). There had to be a new law of tithing, for there has been a change in the priesthood: from Levi to Judah. "For when the priesthood is changed, the law must also be changed" (Hebrews 7:12). Christians are priests through Jesus. How? Through adoption. "But when the fullness of time had come, God sent out his Son, born of a woman, born under the law. He did this to redeem those under the law, so that we might receive adoption as sons" (Galatians 4:4-5). We are priests through adoption into the family of the high priest. The transfer of the priestly line from Levi to Judah marked the transition from the Old Covenant to the New Covenant. "By this also Jesus has given the guarantee of a better covenant. The former priests were many in number, since death prevented them from continuing in office. But because Jesus continues to live forever, he has a permanent priesthood" (Hebrews 7:22–24).

The lower priest pays a tithe to the higher priest. This is the covenantal structure of the tithe. The Melchizedekian priesthood is the biblical model.

The tithe is no longer exclusively agricultural. There is no holy land in Palestine. There are no family farms based on an original inheritance estab-

lished by military genocide. Holy land now encompasses whatever is made holy—set apart—through ownership by Christians. That which we redeem—buy back—from the kingdom of mammon is made holy: set aside because it is under our lawful jurisdiction. This is our inheritance from God, and it is the inheritance that we leave behind to our heirs. God therefore deserves His tithe on the net output of that inheritance. This is a matter of godly inheritance.

D. What You Owe God

First, you owe God a payment of 10% of your net earnings and profits, as surely as the owners of tribal rural land in Mosaic Israel owed the Levites ten percent.

Second, the civil government has nothing to do with tithing. The church is not Levitical. It did not gain an inheritance that is enforceable by civil law. The Levites did gain such an inheritance: an inheritance as enforceable by civil law as ownership of a crop in Mosaic Israel was enforceable by civil law.

Third, if you pay your tithe, you have met your obligation to God. You need not worry about not having paid enough. You can abandon all guilt for not having paid enough.

Fourth, if you do not pay your tithe, you are guilty before God. Start paying your tithe.

Fifth, you owe all of your tithe to your local congregation.

Sixth, if you choose to support other charities, these donations constitute your offerings above your tithe.

Is the tithe owed on gross income or net? Net. Here is why: locusts. "Suppose there is famine in the land, or suppose that there is disease, blight or mildew, locusts or caterpillars; or suppose that its enemies attack the city gates in their land, or that there is any plague or sickness— and suppose then that prayers and requests are made by a person or by all your people Israel—each knowing the plague and sorrow in his own heart as he spreads out his hands toward this temple" (II Chronicles 6:28–29). When they come, the fields are stripped of their crops. The result is devastation. A man owes a tithe on his increase. He does not owe it for that which the locusts consumed in the day of the locust.

The payment is owed on the increase when you convert the asset into money. It is not owed on the income before you deduct your original capital investment. God does not tax your income twice. We know this because of

the Mosaic law of the tithe that governed animals. The owner paid the Levite the tenth animal that passed under the bar. If nine passed through, he owed nothing. "As for every tenth of the herd or the flock, whatever passes under the shepherd's rod, one-tenth must be set apart to the Lord. The shepherd must not search for the better or the worse animals, and he must not substitute one for another. If he changes it at all, then both it and that for which it is changed will be holy. It cannot be redeemed. These are the commandments that the Lord gave at Mount Sinai to Moses for the people of Israel" (Leviticus 27:32–34). [North, *Leviticus*, ch. 37]

Should a Christian pay his tithe first or his income tax? The answer is based on the tax code.

In the United States, taxpayers are allowed to deduct charity payments from their gross income. They pay income tax on their net income after charitable donations.

Here is a hypothetical case. A man earns $50,000. Let us make this calculation easy. Let us say that the United States government is merely as tyrannical as the prophesied Hebrew king (I Samuel 8:14, 17). Let us say that he must pay 10% of his income to the government. He can do this in one of two ways.

> **Pre-tax**: $50,000 minus $5,000 tax = $45,000 after taxes. Tithe owed: $4,500. Total retained after tax and tithe = $40,500
>
> **After-tax**: $50,000 minus $5,000 tithe = $45,000 after tithe. Tax owed = $4,500. Total retained after tax and tithe = $40,500.

For a Christian, this decision is a no-brainer. Pay the tithe on gross income. The church gets $5,000. The Federal government gets $4,500.

If a tax is imposed before charity, as the Social Security (FICA) tax is, he owes the tithe on whatever is left over.

The modern limited liability corporation is legally a person in Anglo-American law. It should therefore pay the tithe. When a Christian creates a limited liability corporation or its equivalent, he should allocate 10% of the shares to his local congregation. If the corporation pays dividends to him, it also pays dividends to the local congregation. He therefore does not owe the payment of a tithe on the dividends he receives. If he decides to reinvest the money rather than take a dividend, the corporation builds equity. At some

point, the corporation may be able to pay more dividends as a result of this reinvested capital investment. If the corporation decides not to pay dividends, then the church will profit from any increase in the value of the shares. It can sell the shares for money. Or, if the owner of the company decides that he wants to sell the company to a large corporation, the church participates in the capital gain associated with the sale of the property. This way, the church is paid what it is owed. In most nations, a corporation is not allowed to pay 10% on its profits to a local church. This gets around that limitation. The church prospers if the individual prospers. In this case the individual is a legal fiction: a corporation.

Conclusion

The payment of 10% of your gross income to your local congregation is a moral responsibility. The prophet Malachi made this clear. Not to pay the tithe to your local congregation is stealing from God.

The tithe is owed to your local congregation because it is the covenantal equivalent of the storehouse in Mosaic Israel. It is payment to the high priest. The high priest is Jesus Christ, the son of God. This is the message of the epistle to the Hebrews. Jesus owes his priestly position to Melchizedek, not Levi. The family of Levi was subordinate covenantally to the high priest of Salem, Melchizedek. Again, the epistle to the Hebrews makes this clear.

The tithe is a priestly obligation. It is the obligation of lower priests to higher priests. The apostle Peter taught specifically that Christians are the New Testament nation of priests that replaced Israel's nation of priests. Israel's nation of priests owed a tithe to the Levites. But the Levites have now been replaced by the priestly order of the institutional church. Therefore, church members owe their tithes to the institutional representative of the high priest, Jesus Christ. This is the institutional church.

The payment of the tithe is an acknowledgment of the non-autonomy of man. The New Testament is clear that the Second Person of the Trinity was the Creator. He was incarnate in bodily form as Jesus Christ. Both are called the son of God. Covenant keepers acknowledge that they are in need of redemption. The high priest has paid the price of their redemption. They are to acknowledge this payment by their payment of 10% of their gross income to the institutional church. They are under the authority of an institutional church. They receive the sacraments from the institutional church. The sacraments are bread and wine. These were also the sacraments that Melchize-

dek gave to Abram. As the household priest, Abram paid Melchizedek his tithe. As household priest, the heads of Christian households are to imitate Abram.

I have gone into all this in greater detail in my book, *The Covenantal Tithe* (2011).

46

CHARITY

Whoever is kind to the poor lends to the Lord, and he will repay him for what he has done (Proverbs 19:17).

Each of you should take care not only for your own needs, but also for the needs of others. You should have the same attitude toward one another as was in Christ Jesus. He existed in the form of God, but he did not consider his equality with God as something to hold on to. Instead, he emptied himself by taking the form of a servant, and he was born in the likeness of men. He humbled himself and became obedient to the point of death, even death of a cross! Therefore God also highly exalted him. He gave him the name that is above every name. He did this so that in the name of Jesus every knee should bend, the knees of those in heaven and on earth and under the earth, He did this so that every tongue should confess that Jesus Christ is Lord, to the glory of God the Father (Philippians 2:4–11).

But if your enemy is hungry, feed him. If he is thirsty, give him a drink. For if you do this, you will heap coals of fire on his head. Do not be overcome by evil, but overcome evil with good (Romans 12:20–21).

Analysis

These passages indicate that the biblical concept of charity is more complex than the typical Christian understands, and certainly far more complex than a non-Christian believes. Charity has to do with dominion. Of course, everything in the Bible has to do with dominion. But the passage from Philippians is so clear that it is startling that any Christian is unaware of the relationship between service to others and personal success in life, including the exercise of authority. This is an explicitly Trinitarian strategy. The Second Person of the Trinity, equal to God, decided to become a man. The man is Jesus Christ. Before the incarnation, He was the creator of the

universe. After the incarnation, He became the Redeemer of the universe. Jesus Christ is the same Person, but in two natures: God and man. This is basic Trinitarian doctrine. There is no other theology like it. It is unique to Christianity. The idea that God the Creator became incarnate in order to save mankind is obviously unique. But equally unique is the assertion that the incarnation established a program of service that leads to Christ's universal triumph at the end of time. Covenant-breakers and covenant-keepers jointly will confess His divinity.

What Jesus did as God, His followers are to do as redeemed people who are new creatures, no longer covenant-breakers. Jesus has provided the model. This model is simultaneously one of total service and absolute dominion. These seem to be opposites. In Christianity, they are linked by the Person of Jesus Christ: His life, death, resurrection, and ascension in history.

This does not deny that covenant-keepers, as stewards of God, are supposed to strive to get wealthy. Getting rich is the message of the parable of the talents (Matthew 25:14–30) and the parable of the minas (Luke 19:11–27). The two stewards who doubled their investments, according to the parable of the minas, were then elevated to rulership over cities. Wealth accumulation is a program of dominion, both personal and kingdom.

Even more astounding to someone unfamiliar with the Bible, charity is a means of bringing an enemy under the negative sanctions of God. This is basic biblical doctrine. It was taught by Solomon. "If your enemy is hungry, give him food to eat, and if he is thirsty, give him water to drink, for you will shovel coals of fire on his head and the Lord will reward you" (Proverbs 25:21–22). [North, *Proverbs*, ch. 76] Paul cited Solomon (Romans 12:20). [North, *Romans*, ch. 10] There is continuity in the program of dominion, Old Testament to New Testament. There are two positive sanctions that result from giving charity to one's enemy. The first is knowing that he will be brought low by God as a result of this charity. The second is that God will provide positive sanctions in your life. These are two highly self-interested motivations in showing charity to an enemy.

There is also the possibility that the testimony of your charity will lead to the conversion of your enemy. Paul did not deny this. The ministry of Jesus did not deny this. But you will search long and hard in the Bible to find a single case of someone who was a professed enemy of a covenant-keeper who became a covenant keeper as a result of the covenant-keeper's act of charity. This is not the normal pattern.

Charity does silence critics. It is difficult for critics to remain critical in the face of self-sacrifice on the part of covenant-keepers. Paul wrote this: "Therefore first of all, I urge that requests, prayers, intercessions, and thanksgivings be made for all people, for kings and all who are in authority, in order that we may live a peaceful and quiet life in all godliness and dignity. This is good and acceptable before God our savior. He desires all people to be saved and to come to the knowledge of the truth" (I Timothy 2:1–4). There is a positive relationship between charity towards those who do not deserve it and the peace of the church. This is a program of evangelism. This was the basis of Jesus' recommendation to His listeners, who were captives under Rome, to become subservient to people in power. "You have heard that it was said, 'An eye for an eye, and a tooth for a tooth.' But I say to you, do not resist one who is evil. Instead, whoever strikes you on your right cheek, turn to him the other also. If anyone wishes to go to court with you and takes away your coat, let that person also have your cloak. Whoever compels you to go one mile, go with him two. Give to anyone who asks you, and do not turn away from anyone who wishes to borrow from you" (Matthew 5:38–42). [North, *Matthew*, ch. 9] This is a general pattern of benevolence. *Biblical charity is self-interested.* It is legitimately self-interested because it builds the kingdom of God in history. God rewards those who are involved in this mighty construction project.

The story known as the rich young ruler is familiar to most Christians. A young man asked Jesus about how to inherit eternal life. He claimed that he had followed the laws of God. Jesus told him to sell everything he had and give to the poor. He went away troubled, for he had great possessions (Matthew 19:16–22). [North, *Matthew*, ch. 38]

> Jesus said to his disciples, "Truly I say to you, it is hard for a rich man to enter the kingdom of heaven. Again I say to you, it is easier for a camel to go through the eye of a needle than for a rich man to enter into the kingdom of God." When the disciples heard it, they were very astonished and said, "Who then can be saved?" Jesus looked at them and said, "With people this is impossible, but with God all things are possible." Then Peter answered and said to him, "See, we have left everything and followed you. What then will we have?" Jesus said to them, "Truly I say to you, in the new age when the Son of Man sits on his glorious throne, you

> who have followed me will also sit upon twelve thrones, judging the twelve tribes of Israel. Every one who has left houses, brothers, sisters, father, mother, children, or land for my name's sake, will receive one hundred times as much and will inherit eternal life. But many who are first will be last, and the last will be first" (Matthew 19:23–30).

Rich people trust in their wealth. This is why they do not enter the kingdom of God. They see their wealth as their means of dominion. The result is that they forfeit eternal dominion. In contrast, Christians who are willing to suffer poverty for the sake of Christ will, in the new heaven and new earth, gain great treasure. They will not only gain treasure; they will gain judicial authority. [North, *Matthew*, ch. 39:A] Paul wrote: "Do you not know that the believers will judge the world? If then, you will judge the world, are you not able to settle matters of little importance? Do you not know that we will judge the angels? How much more, then, can we judge matters of this life?" (I Corinthians 6:2–3). [North, *First Corinthians*, ch. 6]

So, there are two roads to wealth beyond the grave. There are two roads to authority beyond the grave. One is the way of wealth accumulation. The other is the way of poverty. One is the way of the self-sacrifice that is required to gain wealth. The other is the way of the self-sacrifice that is required to give away wealth. It is important for the wealthy man that he be ready at any time to give away his wealth. He must not hang onto it. "Then Jesus said to his disciples, 'If anyone wants to follow me, he must deny himself, take up his cross, and follow me. For whoever wants to save his life will lose it, and whoever loses his life for my sake will find it. For what does it profit a person if he gains the whole world but forfeits his life? What can a person give in exchange for his life?'" (Matthew 16:24–26). [North, *Matthew*, ch. 35] The church of Jesus Christ has room for both kinds of dominion-seekers. It is imperative that you understand this. The Bible's view of self-sacrifice rests on confidence in long-term self-interest. This began with the Second Person of the Trinity in heaven, and it extends into the kingdom of God in history. God set the pattern. We are to follow the pattern.

There is a major exegetical problem with Matthew 19:23–30. It is this: Does it apply throughout history? If it does, then there is no way for Christians to exercise widespread dominion. Money will flow to the top 20% of the society (Pareto's law), who will own 80% of the wealth. Most of these

people will be covenant-breakers. Power follows wealth in every society. This passage, if universal, denies the possibility of Christendom. This means that the fulfilment of the dominion covenant will be achieved apart from widespread faith in God. Mankind in general rather than the church will gain dominion. Thus, the dominion covenant loses its character as an aspect of saving grace, meaning special grace. Covenant-breakers will inherit the lion's share of dominion in history. *This clearly is inconsistent with the ideal of Christendom*. We must choose: Christendom vs. the universality of this rule of money vs. salvation. The outcome of this choice will shape a person's worldview. My conclusion: the Jesus' observation applied to His generation. It may apply to most generations. But it is not universal. [North, *Matthew*, ch. 39]

Although the context of the story of Abraham's near-sacrifice of Isaac on the altar is not one of charity, it is certainly one of self-sacrifice. It is the pattern of God the Father. Abraham was willing to sacrifice his only natural-born son when God required it. God provided a substitute in the form of a ram, but he wanted to test Abraham's commitment. It was a good test for Abraham, as well. He learned that he could fully trust God. He held back nothing. This is the pattern of dominion. It was by means of the near-sacrifice of his own son that the promise of Abraham's own name was fulfilled: father of nations.

A. Charity as Social Insurance

Biblical charity is essential for building God's kingdom on earth, for it reduces our fear of the unknown. We are not to live in fear of the unknown. We are to live in the fear of God, which is the beginning of wisdom (Proverbs 1:7; 9:10). Intense fear of any aspect of the creation tends to paralyze men, to keep them in bondage to the creation. Fear and paralysis are what the biblical covenant was designed to overcome. Perfect love casts out fear (I John 4:18).

Bad things can and do happen to good people from time to time, while good things happen to the unrighteous (Psalm 73). [North, *Psalms*, ch. 17] The world sometimes appears to be governed by a system of perverse historical sanctions. Herbert Schlossberg was correct in *Idols for Destruction* (1983): "The Bible can be interpreted as a string of God's triumphs disguised as disasters." Covenant-keepers are not immune from the corporate curse that God has placed on the creation. We are also not immune to the corpo-

rate curses He placeson the covenant-breaking society in which we live. So, as a way to re-duce our fear of the unknown, God commands us to be generous to others in the faith during their time of need.

Biblical charity is a form of social insurance—not state insurance, but social insurance: provided through voluntarism without any threat of civil sanctions. Biblical charity begins with those who labor in the work of building God's kingdom on earth, who in turn voluntarily support other covenantally faithful people who share in this work. Biblical charity is therefore part of God's system of corporate covenant sanctions—in this case, positive sanctions, beginning with covenant-keepers and extending to covenant-breakers only after those inside the household of faith have been assisted.

Charity creates dependence. This dependence is to be temporary except in cases of permanent physical or mental helplessness. The biblical goal is dominion by covenant, not by permanent dependence. This is why state charity is so dangerous to biblical dominion and therefore to liberty. It creates a permanent political base of dependents and also a permanent corps of state-funded welfare agents whose income depends on the maintenance of poverty to relieve. For this corps of welfare agents, poverty is where the money is. The positive sanction of charity is not to be provided by the state, which must impose compulsory negative sanctions (taxes) on some people in order to extend positive sanctions (welfare) to others. The state is to promote the general welfare only by punishing criminals and defending the nation from invasion. A biblical positive sanction—the general welfare—is the social result of the state's exclusively negative sanctions. The state is required by God to defend the legal boundaries that establish private property, not invade these boundaries in an illegitimate messianic quest to bring positive sanctions to the poor. The civil magistrate is figuratively to stand inside the boundaries beside of the property owner to defend him against any threat of invasion by a non-owner. He is not to stand outside the boundaries by the side of the non-owner, threatening to invade. Defenders of the welfare state reject this view of the civil magistrate. Because so many of these defenders are orthodox theologians and church leaders, Christian social theory today is either non-existent (baptized humanism) or undermined by humanism.

B. The Division of Labor

Adam Smith was famous for emphasizing the importance of the division of labor in production. The division of labor is basic to all of life, begin-

ning in the family. Different people have different assignments. They have different skills and interests. They develop particular skills to such a degree that they are more productive in a specialized area of production than they could be in any other area. The result is greater efficiency of production: greater output per unit of resource input. This means greater wealth for the producers, and it means greater wealth for the consumers.

The principle of the division of labor is equally applicable to the conditions of wealth and poverty. People learn to cope with the challenges around them. Rich people cope with their specialized challenges. So do poor people. Rich people have greater responsibility than poor people do. That is because there is no escape from the link between wealth and responsibility. A person who has greater wealth has greater opportunities. He therefore has greater responsibility for deciding the proper allocation of his funds. The poor man's responsibilities are limited. He has to put food on his family's table. He has to find a way to earn a living. This may not be easy, but it is a problem common to almost all of mankind throughout history.

The man who is skilled at getting rich becomes increasingly skilled. He concentrates on particular ways of getting rich, and he improves his performance over time. As we say, practice makes perfect. Practice does not really make perfect, but it makes for great improvement. Why should we believe that this is not equally true in the area of making money? In my generation, the most successful maker of money is Warren Buffett. He began as a young man as an investor, and he is now perhaps the third richest man in the world. At the age of 88, he still goes to work every day as an investor. I can think of no other rich man in history who has been so successful for such a long period of time.

He knows that he will soon depart from this world. He is an atheist. He intends to give his wealth to another atheist's charitable foundation: Bill Gates. Gates is probably the second richest man in the world. But, unlike Buffett, he walked away from the realm of moneymaking to run his foundation. He oversees the distribution of this wealth around the world. He is probably the most successful builder of wealth in history who then became a successful donor of wealth. The only man comparable to him in American history was Andrew Carnegie, who made a fortune in producing steel. Beginning on January 1, 1901, when he sold his company, he began to give the fortune away on a full-time basis. John D. Rockefeller, Sr. did the same thing. But Carnegie gave a greater portion of his fortune away in his lifetime than

Rockefeller did: about 90%. Both men supported humanistic causes. Both men established large bureaucracies staffed with people of similar persuasion. Their foundations did not support the free market that had made both of them wealthy.

In the 1970s, I knew a free-market economist who was an advisor to one of the richest conservative businessmen in the world, Pierre Goodrich. The advisor's name was Ben Rogge [ROWEguee]. He made this observation about Goodrich and his peers. "Rich people know how to make money. They do not know how to give it away." He understood the principle of the division of labor. He also said this: "My goal in advising Goodrich is this: to keep him from doing too much harm with his money." He was successful in this role.

When it comes to giving away great wealth, philanthropists are not uniquely skilled. When poor people give away money to slightly poorer people, they are in a position to evaluate the reasons for the recipients' poverty. They know whether the person has fallen on hard times irrespective of his own hard work and diligence. They also know when a person is a profligate who deserves to be poor. They use their money in a more productive way. In other words, they are more efficient in giving away their own money. In contrast, an extremely rich man has no contact with people who are really poor. He is in contact mainly with people who are also very rich. They do not have contact with poor people. At best, they have contact with their foundations' upper-middle-class salaried employees. These employees are recruited out of the same pool of talent: universities. The money that rich men give away is unlikely to raise the living standards of the poorest people. At best, the rich will give money to support medical research that will improve the quality of life of very poor people. Bill Gates' foundation has invested $2 billion to fight malaria. His wife is an expert in malaria. She taught herself the basics. She has specialized in the philanthropic division of labor. If this research turns out to be highly productive, then extremely poor people in sub-Saharan Africa will be benefitted.

There must be a hierarchy of charitable giving. Extremely wealthy people at the top of the wealth pyramid must higher upper-middle-class people to administer the money. They, in turn, must figure out how to allocate this money so as to improve the lives of poor people, sick people, and other people in need. But most charitable foundations concentrate in other areas than helping the poor. They give great amounts of money to a handful of universities. They support modern art. They support the favorite causes of

the founders of the foundations. A low percentage of their donations trickles down to the poor.

C. Marginal Income vs. Charity

The logic of modern economics rests heavily on the concept of marginal utility. This was the great discovery in the first half of the 1870s by Menger, Jevons, and Walras. According to marginal utility theory, other things remaining constant over time, each additional unit of income that someone receives will be allocated to satisfy whatever was at the top of his "not worth buying" list before he received the extra income. This is logical. We do not spend our money on items that are less valuable to us. We spend our money on items that are more valuable to us. The logic of this approach to economics assumes that there is a hierarchy of economic value in everybody's life. But tastes do change. Conditions change. *Other things do not remain constant*. So, economic theory is to this extent logical at the expense of being realistic. It is abstract. It is Parmenidean at the expense of Heraclitus. With respect to many discussions of economic thought and practice, the assumption of declining marginal utility has proven to be a productive assumption in explaining the profit-seeking market process. Economists use it all the time. They should use it with fear and trepidation.

If the theory were applicable across the boards, as each person's income rises, he would give a greater share of his income to charity. After all, he has satisfied his basic wants. He is not hungry. He is not cold. If he lives in a hot climate, he is not perspiring. He has air conditioning. Electricity serves him 24 hours a day. He has enough money to pay for any physicians that he needs. Furthermore, he has a comprehensive health insurance policy for himself and his family. Such a person was described well by Solomon: "The wealth of the rich is his fortified city and in his imagination it is like a high wall" (Proverbs 18:11). He trusts his money. Most of the time, his trust is well-placed. He does not suffer the crises that afflict the poor man. He has other crises, but they are not the crises that afflict the vast majority of humanity. [North, *Proverbs*, ch. 54]

Given marginal utility theory, we might guess that poor people would not give much of their wealth to charity. But, as they grow richer, they would give an increasing percentage of their wealth to charity. But this is not what we find. Poor people in the United States generally give a higher percentage of their wealth to charity than all but the superrich do. Rich people reinvest

their money; they do not give it away. This is true around the world. This seems to deny the principle of marginal utility. I believe that it does deny its relevance in this important area of life. I believe that the accumulation of wealth becomes an addiction in some people, usually men. People accumulate wealth, not for the consumption that it will afford them, but for the sake of accumulation itself. It is the motivation of the miser. Rich men define their success in terms of how much wealth they possess. Wives of rich men define themselves in terms of their husbands' wealth.

This was true in Jesus' day. This was the problem—a psychological problem—that afflicted the young man who refused to sell his goods and give to the poor as a precondition of following Jesus. It should be clear why this was a requirement. All of the disciples were poor. That young man could not be brought into the circle of the disciples without completely disrupting the program that Jesus was demonstrating to them. His money would have bought everything the disciples needed. His generosity to the disciples and to Jesus would have undermined the evangelism program that subsequently spread across the Roman Empire.

Jesus had no big donors. He did not want big donors. There were some rich people who held banquets for him. He attended these banquets, but He soon departed. He did not choose to mix socially with the rich and famous. The men who joined him had abandoned their wealth. Four fishermen who were successful enough to own their own boats walked away from their joint venture. Levi/Matthew walked away from his wealth as a tax collector. Their wealth would have been a liability in the original circle of disciples.

Therefore, in the area of charity, the logic of marginal utility is an ineffective analytical tool. It also does not explain the motivation of rich people who accumulate wealth. Why do they keep investing in new projects? They do this because their tastes change, their opportunities change, and their vision of dominion changes. They move into circles of greater wealth and influence. Within these circles, the rich man becomes what Americans call "the low man on the totem pole." They are now entry-level performers. They wish to prove that they are as good and maybe better than those around them, so they must dedicate their lives to an even more frantic accumulation of wealth. All of this benefits consumers. The consumers are the great beneficiaries of the sense of inferiority or lack of achievement that progressively afflicts the rich. The free market is a system for channeling the psychological addiction of the rich into paths for serving consumers. The esca-

lating individual quest for greater wealth benefits consumers, unlike the escalating individual quest for greater power, which almost always afflicts the general public.

D. Success Indicators in the Nonprofit World

The world of commerce and business is the world of profit and loss. Ludwig von Mises described this world in his little book, *Bureaucracy* (1944). It is the world of profit management. It is the world of open entry, of competition for consumers' money, in an economy based on monetary profit and loss. It is a world of accounting systems. Success or failure is governed by monetary profit or loss.

1. Bureaucratic Management

In contrast, Mises argued, is bureaucratic management. He had in mind civil government, but his analysis also applies to the nonprofit world of charitable foundations. Here, no one owns the business. No one working for the business has a legal claim on the profits of the business. Because these are not businesses, they are not governed by profit and loss. They are governed by other standards. These standards are affected by the amount of money that comes in to the organizations, but consumers are not in charge. Their decisions to buy or sell in a competitive market are not the basis of profit and loss. In the case of civil government, taxpayers fund the system. In the case of nonprofit organizations, donors fund the system. The problem for economic theory is this: *there is no theory of economic success for nonprofit organizations*. That is because consumers are not in charge; donors are in charge.

Donors cannot be sure whether the money that the organization they donate to is doing a good job. In the business world, a good job is simple to define: making a profit. But that criterion is not available to a nonprofit organization. First, what are the criteria that govern a nonprofit organization? Second, how does the organization prove to donors that it has met the criterion effectively in the previous fiscal year? There are no theoretical answers to these two questions. Each organization is different. Each organization has different success indicators.

The church is not a profit-seeking organization. Historically, it is the model in Western civilization for an effective nonprofit organization. It has survived the test of time in many cultures around the world, but it has

been most successful in the West. It has shaped the West. The West is what it is in part as a result of what the church has been. Donors who are members of churches are recipients of benefits. These benefits are not generally economic, except when someone falls into poverty, and he gets support from the local congregation. This is not the normal pattern of benefits for church members. Church members hear weekly sermons. They get fellowship. But, because the church is not a profit-seeking organization that sells these services, members get these services irrespective of how much money they donate. There is no monetary connection between benefits received and donations made.

Success is less clear in nonprofit organizations. Church members do get some benefits as members. They are consumers of church resources. Donors to nonprofit charities are not consumers of the resources generated by these charities. They are acting as stewards for poor people, sick people, or people afflicted with other burdens. They have some general sense that the charity is acting responsibly on their behalf of the people served, but there are few metrics. There is nothing comparable to a profit-and-loss report from an accountant. There is nothing comparable to the prices of corporate shares on the stock market.

2. Few Metrics

Donors to nonprofit organizations take a great deal on faith. They have faith that the reports issued by these organizations faithfully reflect the success of these organizations. This takes a great deal of faith. They may use other metrics. One of them would be the amount of money spent on fundraising in relation to the amount of money spent on the charities' programs of helping the afflicted. Another might be the salaries paid by the organizations to the senior bureaucrats who run them. But none of these metrics is really proof of the success or failure of the organization. This problem also afflicts the senior managers of the organization. They cannot be sure that their allocation of funds is optimum. There are no criteria for optimum. There is only guesswork.

Donors who actively participate occasionally in the day-to-day operations of a nonprofit organization may get a better sense of the success or failure of the organization. But the largest money donors do not have low-value time to donate. There is a Pareto distribution of donations. The top 20% of donors provide 80% of the donated funds. The top 1% of the donors

donate about half of the money. These people do not have low-value time to donate to the organization. They give money in faith.

In the business, there are economies of scale. The larger the organization, the greater the economies of scale. But there are limits here. At some point, accurate information about the operations of the business become muddled. This is because access to information within the organization is not based on a competitive pricing system. So, large organizations can get too large for them to maximize profits. The profit-and-loss system warns senior managers and investors that an organization is losing its competitive edge. There is nothing comparable to this in the realm of nonprofit organizations. So, the larger the organization gets, the less clear its success indicators become. The benefits that it provides to poor people, in comparison to the benefits provided by rival charities, are not measurable in the way that business success is. The less measurable the success indicators are, the greater the amount of faith that must be exercised by donors.

E. Charity as Training in Dominion

Learning how to make money is training in dominion for a handful of covenant-keepers. It is also training in dominion for a handful of covenant-breakers, but it does them no good in the world beyond the grave. They serve the kingdom of mammon. He promises nothing beyond the grave. The Bible makes it clear that this pathway to dominion is fraught with danger. "Two things I ask of you, do not withhold them from me before I die: Put vanity and lies far away from me. Give me neither poverty nor riches, just give me the food I need. For if I have too much, I might deny you and say, 'Who is the Lord?' Or if I become poor, I might steal and profane the name of my God" (Proverbs 30:7–9). [North, *Proverbs*, ch. 85]

For the vast majority of Christians in history, the biblical pathway of dominion has been charity, not wealth accumulation. There are always vastly more poor people than rich people. A strategy of dominion that rested exclusively on the accumulation of wealth would have excluded from influence the vast majority of Christians. Also, because marginal utility theory does not apply well to the accumulation of wealth as a motivation for increasing charitable giving, Christianity would have never achieved cultural dominion in the West if Jesus' strategy had been based on wealth accumulation. Such a strategy would have been a strategy for the cultural domination of the Christian world by an elite of wealthy people. Christian-

ity opposed such a strategy. James had contempt for the covenant-breaking rich. "Come now, you who are rich, weep and wail because of the miseries coming on you. Your riches have rotted, and your clothes have become moth-eaten. Your gold and your silver have become tarnished and their rust will be a witness against you. It will consume your flesh like fire. You have stored up your treasure for the last days. Look, the pay of the laborers is crying out—the pay that you have withheld from those who harvested your fields, and the cries of the harvesters have gone into the ears of the Lord of hosts. You have lived in luxury on the earth and indulged yourselves. You have fattened your hearts for a day of slaughter. You have condemned and killed the righteous person. He does not resist you" (James 5:1–6).

The vast majority of people are not extremely rich. It is unlikely that they ever will be. The pyramid of wealth seems constant over time. There are always extremely rich people, but they are a minority, meaning a fraction of a percent, of those people who live in poverty. But in the free market system, the ability of people at the top to get rich has been the basis of the ability of people at the bottom to escape grinding poverty. Escaping grinding poverty is what the Lord's prayer specifies: daily bread. The Lord's prayer does not call on God to make his people wealthy. Yet the effect of the free market over the last two centuries has made poor people wealthy on a scale that would not have been believed in 1900, let alone 1800. In the West, and in those regions of the world that trade with the West, grinding poverty has disappeared. Christians go through the ritual of praying for their daily bread, but a lot of them also think that they ought to go on diets. They have gained too much weight. Even this is a misinterpretation of Scripture. In the Bible, fat is a blessing. Being thin is not. Of course, fat then was not based on the modern diet of highly salted food, high fat content, lots of sugar, and the other things that fatten us. We have not proven to be good stewards of our enormous wealth, and it has led to our enormous girth, compared other cultures. The immigrant from India, Dinesh D'Sousa, grew up in Mumbai. He had a friend who wanted to come to America. He asked his friend why. His friend had a cogent answer: "In America, poor people are fat."

There is always a hierarchy of wealth. The person who has wealth that he can give away is wealthier than the person to whom he gives it. There is always hierarchy of wealth. A generous man may be poor in his own eyes, but he is in better economic shape than the person who receives his charity. The person who can afford to give away money should be grateful to God

that he is in this position. This is a gift of God. If he puts the gift to good use, he will become a wiser person in the allocation of his funds. He may not get rich, but he will not get poor. This is what the Bible recommends for most covenant-keepers.

F. Tithe First, Then Become Charitable

The Bible requires the tithe. The tithe that is owed to the local congregation. I have explained this in Chapter 44. Any money that is kept by a Christian in excess of 90% of his net income is theft from God.

This means that charity must begin with the self-discipline that is associated with paying the tithe. This is the original training ground of dominion. The individual ritually admits that he is not the source of his wealth, and that God has mandated his acknowledgment of this hierarchical reality: paying a tithe to the local church. The tithe is a ritual acknowledgment of the biblical principle of stewardship. Ownership is delegated from God. Christians owe a tithe on this delegated income.

Beyond the tithe, there is no explicit commandment with respect to a percentage of a person's income that should be devoted to charity. If the person wishes to exercise dominion by accumulating wealth, which is a form of capital, that is legitimate. But he must not forget the poor. He started out poor. Paul wrote: "For we have brought nothing into the world. Neither are we able to take out anything. Instead, let us be satisfied with food and clothing. Now those who want to become wealthy fall into temptation, into a trap. They fall into many foolish and harmful passions, and into whatever else makes people sink into ruin and destruction. For the love of money is a root of all kinds of evil. Some people who desire it have been mislead away from the faith and have pierced themselves with much grief" (I Timothy 6:7–10). The temptation to extend dominion through wealth accumulation is very great. The temptation to extend dominion through charitable giving is not equally great, at least not in the lives of those who have not begun such a program of self-discipline.

The rise of nonprofit foundations and charitable ministries that are not part of the institutional church, often called parachurch ministries, has come as a result of widespread theft. Christians who have not paid their tithes to their local churches have instead donated money to nonprofit ministries. This is morally wrong. *All nonprofit Christian ministries should be supported either by local churches or by donations from people who tithe to*

their local churches. This should be obvious to anyone who has studied the tithe, but it is not. God has first claim on our wealth. That claim is manifested in the mandatory tithe. It is not manifested in donations from Christians who are not tithing. If you have believed Chapter 45, you will not give away money that you owe to your local congregation. Your charitable impulse must come from your post-tithe income.

If you are going to donate time to a charitable ministry, but you cannot afford to donate money above the tithe, this is legitimate. You are not required by God to get a second job which will provide enough income for you to give to various ministries. For poor people, their donation of time to charitable ministries is a great service. It is a public manifestation of charitable giving that is not provided in secret. It is difficult to donate time to a charity without becoming known as a donor. Jesus warned against those who did their charity in full public view. Someone who donates time to a charity in private view has not violated Jesus' principle of charity given in private. It is an effective form of charity. Poor people know that rich people can easily write a check. They know that the donation of time is a serious donation.

Charity should be a donation out of the donor's funds. If the donor is not a tither, he is not donating his funds. He is donating God's funds. God is not impressed by such donations except when they are made in ignorance. From this point on in your life, such donations will not be made in ignorance.

Conclusion

Jesus made it clear that charitable giving is a means of dominion both in history and eternity. It was His strategy as the Second Person of the Trinity. To imagine that any other strategy would work for the Christian church is silly.

It is a great temptation for poor people who have heard the gospel to imagine that God's path of dominion for them is based primarily on increasing wealth. Jesus never taught this. This is not to say that, for some spiritually gifted people, greater wealth cannot be a program of dominion. But their accumulation of wealth must be based on self-conscious service to consumers, and it must be accompanied by at least the tithe.

It takes time to become a skilled donor. The division of labor principle tells us this. We must specialize early. We must gain the skills associated with effective giving, which is wise giving. The development of Christian

wisdom takes experience. This is why people should learn early to tithe. Then they should learn to give additional money away.

There have rarely been Christians who have accumulated great wealth and who have been equally successful in giving away their money. Rich Christians have little experience in giving their money away. They come to this late in life. They are easily deceived by well-educated bureaucrats who feign allegiance to their worldview, but who abandon this worldview shortly after the deaths of the founders. It is far easier for a deceiving staff of highly educated bureaucrats to steal a nonprofit foundation than it is for a similarly dedicated and educated group of bureaucrats to steal a denomination. Theological liberals have done both, but the speed and ease of stealing a foundation is vastly more efficient than stealing a denomination.

47

CONTENTMENT

Now godliness with contentment is great gain. For we have brought nothing into the world. Neither are we able to take out anything. Instead, let us be satisfied with food and clothing. Now those who want to become wealthy fall into temptation, into a trap. They fall into many foolish and harmful passions, and into whatever else makes people sink into ruin and destruction. For the love of money is a root of all kinds of evil. Some people who desire it have been mislead away from the faith and have pierced themselves with much grief (I Timothy 6:6–10).

I greatly rejoice in the Lord because now at last you have renewed your concern for me. You had indeed been concerned for me before, but there was no opportunity for you to help. I am not saying this because I am in need. For I have learned to be content in all circumstances. I know what it is to be poor, and I also know what it is to have plenty. In every way and in all things I have learned the secret of how to be well-fed or to be hungry, and how to have an abundance or to be in need. I can do all things through him who strengthens me (Philippians 4:10–13).

Let your conduct be free from the love of money. Be content with the things you have, for God himself has said, "I will never leave you, nor will I forsake you." Let us be content so that we may have courage to say, "The Lord is my helper; I will not be afraid. What can a man do to me?" (Hebrews 13:5–6).

Analysis

There are numerous religious traditions that recommend detachment from both wealth and poverty. In the West, Stoicism rivaled Christianity in this regard. The phrase "stoic mentality" is still common in English. But the number of people who are serious students of stoicism is limited, and it al-

ways has been. In contrast, the number of people who are been committed to Christianity is enormous.

1. A Detached Attitude

The problem comes in applying the principle of detachment that Paul described in these two passages, and the author of the epistle to the Hebrews reinforces. Christians believe that these texts possess moral authority based on the revelation of the Holy Spirit to inspired authors. These are not philosophical principles. They are not limited to a self-disciplined elite of philosophers. These principles are universal in scope, and they are morally binding on those people who profess Christianity. They demand an attitude of detachment from the common pleasures and comforts of this life. Blessings are legitimate. They are blessings from God (James 1:17), but possession of them does not define us as covenant-keepers. Covenant-keepers must not regard either their absence or their removal in their lives as a curse of God. The book of Job is a testimony to this outlook.

Paul had numerous ups and downs in his life. We learn of him first as a participant in the stoning of Stephen. We are told that Paul, then named Saul, participated. He was a young man (Acts 7:58). He became a persecutor of the church (Acts 8:3). The high priest authorized him to persecute Christians (Acts 9:1–2). He had been a student of Rabbi Gamaliel (Acts 22:3). He was a leader in the community, despite his youth. After his conversion to Christianity, he became the apostle to the gentiles. He was the first apostle to the gentiles outside of Jerusalem. In this capacity, he was subjected to repeated persecutions. He wrote of his own experiences: "For God is the one who said, 'Light will shine out of darkness.' He has shone in our hearts, to give the light of the knowledge of the glory of God in the presence of Jesus Christ. But we have this treasure in jars of clay, so that it is clear that the exceedingly great power belongs to God and not to us. We are afflicted in every way, but not overwhelmed. We are perplexed but not filled with despair. We are persecuted but not forsaken. We are struck down but not destroyed" (II Corinthians 4:6–9). "From Jews I received five times the 'forty lashes minus one.' Three times I was beaten with rods. Once I was stoned. Three times I was shipwrecked. I have spent a night and a day on the open sea. I have been on frequent journeys, in danger from rivers, in danger from robbers, in danger from my own people, in danger from the Gentiles, in danger in the city, in danger in the wilderness, in danger at sea, in danger

from false brothers. I have been at hard work and in hardship, in many sleepless nights, in hunger and thirst, often in fasting, in cold and nakedness. Apart from everything else, there is the daily pressure on me of my anxiety for all the churches" (II Corinthians 11:24–28). The church has long believed that he was executed by the Roman authorities. He ended his final years in a Roman prison. So, his own life stands as a testimony to his willingness to suffer extensive persecution for the sake of the gospel.

We see in his life and in his epistles another confirmation of the pattern established by the Second Person of the Trinity in His incarnation as Jesus Christ. Quoting Paul, "He existed in the form of God, but he did not consider his equality with God as something to hold on to. Instead, he emptied himself by taking the form of a servant, and he was born in the likeness of men. He humbled himself and became obedient to the point of death, even death of a cross!" (Philippians 2:6–8). [North, *Epistles*, ch. 20] What is unique about Christianity is this: suffering is a means of worldwide dominion. "Therefore God also highly exalted him. He gave him the name that is above every name. He did this so that in the name of Jesus every knee should bend, the knees of those in heaven and on earth and under the earth. He did this so that every tongue should confess that Jesus Christ is Lord, to the glory of God the Father" (Philippians 2:9–11). Christianity does not teach suffering for suffering's sake. It teaches suffering for victory's sake. This victory is ultimately the victory of Jesus Christ over his enemies.

2. A Vision of Victory

This is the theological background to Paul's statement: "Now godliness with contentment is great gain" (I Timothy 6:6). This contentment is based on a specific eschatology: the victory of Christianity in history and eternity. It is the contentment of someone who believes that he is part of an unstoppable program of progress. As a covenant-keeper, he participates in the expansion of the kingdom of God in history. Paul made this clear in I Corinthians 15. He cited Psalm 110, which is the psalm that spells out God's footstool theology. It says: "The Lord says to my master, 'Sit at my right hand until I make your enemies your footstool.' The Lord will hold out the scepter of your strength from Zion; rule among your enemies. Your people will follow you in holy garments of their own free will on the day of your power; from the womb of the dawn your youth will be to you like the dew. The Lord has sworn, and will not change: 'You are a priest forever, after the manner

of Melchizedek'" (Psalm 110:1–4). The epistle to the Hebrews specifically identifies Jesus Christ as the high priest in the order of Melchizedek (Hebrews 7). Therefore, Paul applied the language of Psalm 110 to Christ's victory in history. "But now Christ, who is the firstfruits of those who died, has been raised from the dead. For since death came by a man, by a man also came the resurrection of the dead. For as in Adam all die, so also in Christ all will be made alive. But each in his own order: Christ, who is the firstfruits, and then those who belong to Christ will be made alive at his coming. Then will be the end, when Christ will hand over the kingdom to God the Father. This is when he will abolish all rule and all authority and power" (I Corinthians 15:20–24). [North, *First Corinthians*, ch. 17]

Paul's vision of victory was unique in the ancient world. His optimism regarding the outcome of the efforts of kingdom-builders in history provided the psychological impetus for generations of evangelists and missionaries to risk their lives and suffer death at the hands of covenant-breaking leaders in covenant-breaking societies. The crucifixion of Christ was the model for Paul. The ministry of Paul in turn is the model for Christians who are devoted to worldwide evangelism. "Be imitators of me, just as I am an imitator of Christ" (I Corinthians 11:1). [North, *First Corinthians*, ch. 15] The goal of evangelism is not simply the conversion of souls. This goal is the transformation of society. Paul and the disciples believed that the ethical transformation of individuals leads to the ethical transformation of institutions. They did not believe that God's redemption in history is souls-only redemption. They believed that redemption applies to every area of life in which sin prevails. This means every area of life. Ethical sanctification is progressive. It is not simply personal sanctification. Personal sanctification leads to the sanctification of those areas of life in which the converted Christian now possesses authority. This means family sanctification. It means business sanctification. God's promise of social sanctification in Leviticus 26:1–13 and Deuteronomy 28:1–14 did not end when the Romans burned the temple of Jerusalem. It still is in force.

Paul's vision of victory rested on a specific doctrine of providence. Paul and the apostles did not believe that the world is random. They believed that there is cause and effect linking biblical ethics and success. Moses taught this to the generation of the conquest. "He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My

power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:16–18). [North, *Deuteronomy*, ch. 22] This declaration identifies money and wealth as aspects of covenantal confirmation. It legitimizes the pursuit of money and wealth. But it denies the pursuit of money and wealth for their own sake. They are to be seen as God's positive sanctions on obedience, both individual and corporate.

In no other ancient religions was the pursuit of wealth legitimized to the extent that it was among the Israelites and the Christians. This pursuit had to be covenantal. It had to be *wealth through service*. This was the covenantal/theological framework of Paul's declaration of contentment. Contentment is great gain, he said. But this contentment is not the product of psychological techniques of mystical withdrawal from the world. Rather, it is the contentment of someone with a warrior mentality who knows that he serves a king who cannot be defeated in history. His setbacks in life are part of a divine strategy that began before the foundation of the world. Life is not random. It is providential.

A. Optimism and Motivation

Optimism is basic to entrepreneurship. Individuals do not know the future, which is uncertain. Everyone must deal with this uncertain future. There is no guarantee in advance that any venture will be profitable. But entrepreneurs possess a degree of optimism that is not common among the general population. The fear of public failure does not burden them. It does burden most people. This fear is an enormous barrier to entry. For those people who are not seriously afraid of failure in their economic ventures, this barrier to entry keeps competition out of the marketplace. This is an advantage to those who possess this degree of optimism.

What is true of individuals is true of movements. Part III of Ludwig von Mises' 1922 book, *Socialism*, is titled: "The Alleged Inevitability of Socialism." He understood just how powerful this idea was. "Nothing has helped the spread of socialist ideas more than this belief that Socialism is inevitable. Even the opponents of Socialism are for the most part bewitched by it: it takes the heart out of their resistance" (*Socialism*, III:I:1). Christianity as articulated by Paul has an even greater degree of optimism. It is an optimism based on the idea that God is absolutely sovereign. Paul articu-

lated this clearly in the ninth chapter of his epistle to the Romans: the section on Rebecca and her as-yet unborn twins, Isaac and Esau. It pervaded all of his thought.

Because Christianity affirms the doctrine of God's creation of the universe out of nothing, Christians who believe this doctrine have an advantage over all those who believe in a world that evolved out of impersonal chance by way of unbreakable impersonal law. There is no sovereign personalism in their universe. There was no creation because there was no Creator. There was no design. There was no purpose. They do not believe that social causation is inherently ethical, that the outcomes of cause-and-effect reflect a specific form of ethics. They do not believe that this ethics is grounded in the revelation of a God who is sovereign over history. So, from the point of view of economic theory, Christianity and humanism are in permanent disagreement.

Whenever Christians believe Paul's doctrine of contentment, and whenever they believe his doctrine of the sovereignty of God, they possess an advantage in both economic theory and economic practice. They believe in a world which is not a level playing field, let alone a world which is tipped in favor of covenant-breakers. They believe in a world in which economic causation is tipped in favor of biblical ethics. They should also understand that there is no one-to-one relationship between doing the right thing and getting rich. If they are wise, they have read the book of Job. Chapter 1 reveals that Job was the most righteous man of his era, and he was also the richest man. But then God let Satan bring him low for a period of time. Why? To demonstrate a point. What was the point? God's sovereignty in history. He answers to no one. He declared this in chapters 38 through 41. Then He restored Job to greater wealth than before, as we read in Job 42.

Initially, Job made his famous declaration: "Then his wife said to him, 'Do you still hold fast to your integrity? Curse God and die.' But he said to her, 'You talk as a foolish woman talks. Should we receive the good from God and not receive the bad?' In all this matter, Job did not sin with his lips" (Job 2:9–10). He was verbally content with his new conditions. Only in chapter 3 did he fall into sin when he attempted to defend his righteousness against three of his four visitors, who invoked ethical causation as the reason for his afflictions. They were wrong, and God condemned them later for their words (43:7–10).

Joseph was treated badly by his brothers and by Potiphar's wife. He did not complain. He maintained his integrity, and he also maintained his efficiency. There is no sign that he was discontented with his condition. God raised him up, incident by incident, service by service, until he was the second most powerful man in the land. He became the deliverer of his family, and he became the deliverer of Egypt. He did not lose hope, as far as the text reveals. He continued to perform efficiently in all that he did, despite the fact that he had been delivered first into slavery, then into a prison.

Paul did not grow discouraged, despite the visible setbacks in his ministry. There was a fundamental optimism in his outlook that guided him through a series of disasters that would have defeated most other men. He came back from these setbacks. They did not defeat him. Here was his life's declaration: "It is my eager expectation and certain hope that I will in no way be ashamed, but that I will have complete boldness, so that now as always, Christ will be exalted in my body, whether by life or by death. For to me to live is Christ and to die is gain. But if I am to live in the flesh, that means fruitful labor for me. Yet which to choose? I do not know. For I am hard pressed between the two. My desire is to depart and be with Christ, which is far better, yet to remain in the flesh is more necessary for your sake" (Philippians 1:20–24). This reveals the extent of his contentment. For the sake of service to the church, he was content to live. But he preferred to die. This was a strong declaration of faith. It was a declaration of faith that is common to martyrs.

One of the characteristic features of successful entrepreneurs is that several of their ventures may fail before one of them is successful. The bankruptcy laws and the laws establishing limited liability corporations make bankruptcy only a short-term setback for people who are not embarrassed to lose in public. Henry Ford is a classic example. He went bankrupt twice before the Ford Motor Company became one of the great success stories of the early twentieth century. He had great self-confidence. The first two sets of investors who shared his confidence wound up with nothing. But he continued to persevere, and finally he was a success. Walt Disney went bankrupt in 1923. Milton Hershey went bankrupt twice before he created the candy company that bears his name. Their intense optimism regarding their own efforts led to their recovery. The cosmic optimism of Christians should lead to even greater rebounds from setbacks.

B. Discontentment and Human Action

In his magnum opus, *Human Action*, Mises devoted considerable space to the question of why we act. This is the methodological heart of his book. It is the basis of his economic theory. He said that we act because we are discontented with our present situations. He began his book with this observation.

> We call contentment or satisfaction that state of a human being which does not and cannot result in any action. Acting man is eager to substitute a more satisfactory state of affairs for a less satisfactory. His mind imagines conditions which suit him better, and his action aims at bringing about this desired state. The incentive that impels a man to act is always some uneasiness. A man perfectly content with the state of his affairs would have no incentive to change things. He would have neither wishes nor desires; he would be perfectly happy. He would not act; he would simply live free from care.
>
> But to make a man act, uneasiness and the image of a more satisfactory state alone are not sufficient. A third condition is required: the expectation that purposeful behavior has the power to remove or at least to alleviate the felt uneasiness. In the absence of this condition no action is feasible. Man must yield to the inevitable. He must submit to destiny. (I:I:2)

I disagree with Mises in equating discontent with human action. "But action can only be imputed to a discontented being, and repeated action only to a being who lacks the power to remove his uneasiness once and for all at one stroke. An acting being is discontented and therefore not almighty. If he were contented, he would not act, and if he were almighty, he would have long since radically removed his discontent" (*Human Action*, II:I:11) God acts, but He is not discontented. Covenant-keepers also act, but they should not be discontented.

Christianity teaches that we can have contentment along with uneasiness. There is always uneasiness in a world filled with sin. Christians believe that sin can be progressively overcome in history, and they dedicate their lives in specialized efforts to roll back sin. There is an inherent reforming

element in Christianity. It begins with self-reform, but it extends beyond self-reform. So, what Mises spoke of as uneasiness as a motivational factor in human decision-making, Christians can and should agree. But this does not imply that Christians should be discontented. Paul was clear about this. We must separate our contentment with respect to the providence of God and our roles in this province from uneasiness about our own performance. Jesus was quite clear about this. "The apostles said to the Lord, 'Increase our faith.' The Lord said, 'If you had faith like a mustard seed, you would say to this mulberry tree, "Be uprooted, and be planted in the sea," and it would obey you. But which of you, who has a servant plowing or keeping sheep, will say to him when he has come in from the field, "Come immediately and sit down to eat"? Will he not say to him, "Prepare something for me to eat, and put a belt around your clothes and serve me until I have finished eating and drinking. Then afterward you will eat and drink"? He does not thank the servant because he did the things that were commanded, does he? Even so you also, when you have done everything that you are commanded, should say, "We are unworthy servants. We have only done what we ought to do"' (Luke 17:7–10). This outlook is basic to the Christian faith. There is always room for improvement in our lives. This applies to every aspect of our lives. This is the meaning of progressive sanctification. This is the meaning of extending the kingdom of God in history.

We must distinguish conceptually between a lack of contentment and the lack of ease. *We servants are always uneasy about the quality of our performance, but this should not make us discontented*. Contentment has to do with acceptance of that which we cannot change, for better or worse, without violating our fundamental principles. If we suffer setbacks for doing the right thing, we should rejoice. Paul wrote: "Not only this, but we also rejoice in our sufferings. We know that suffering produces endurance. Endurance produces character, and character produces certain hope, and that hope does not disappoint because the love of God has been poured into our hearts through the Holy Spirit who was given to us. For while we were still weak, at the right time Christ died for the ungodly" (Romans 5:3–6). Always we must go back to Christ's death on the cross as our model for victory. His death on the cross was followed by his resurrection, and then, 40 days later, by His ascension to the right hand of God (Acts 1:3, 9).

C. The Hedonic Treadmill

A lack of discontentment about our circumstances enables us to escape a phenomenon known as the hedonic treadmill. This phenomenon has been explored repeatedly by psychologists and economists who are part of the sub-discipline of economic theory known as behavioral economics. Wikipedia defines this idea. "The hedonic treadmill, also known as hedonic adaptation, is the observed tendency of humans to quickly return to a relatively stable level of happiness despite major positive or negative events or life changes. According to this theory, as a person makes more money, expectations and desires rise in tandem, which results in no permanent gain in happiness." The behavioral economist Dan Ariely devoted a section of his book, *The Upside of Irrationality* (2010), to this issue. "And in failing to anticipate the extent of our hedonic adaptation, as consumers we routinely escalate our purchases, hoping that new stuff will make us happier. Indeed, a new car feels wonderful, but sadly, the feeling lasts for only a few months. We get used to driving the car, and the buzz wears off. So we look for something else to make us happy: maybe new sunglasses, a computer, or another new car. The cycle, which is what drives us to keep up with the Joneses, is also known as the hedonic treadmill. We look forward to the things that will make us happy, but we don't realize how short-lived this happiness will be, and when the adaptation hits we look for the next new thing. 'This time,' we tell ourselves, 'this thing will really make me happy for a long time'" (p. 175).

Ecclesiastes recognized this a millennium before the birth of Christ. "Whatever my eyes desired, I did not withhold from them. I did not withhold my heart from any pleasure, because my heart rejoiced in all my labor and pleasure was my reward for all my work. Then I looked on all the deeds that my hands had accomplished, and on the work that I had done, but again, everything was vapor and an attempt to shepherd the wind. There was no profit under the sun in it" (Ecclesiastes 2:10–11). [North, *Ecclesiastes*, ch. 2] The fact that modern psychologists and at least some economists are beginning to deal with this issue is positive. They are slow learners, but at least they are learning. But, as they learn even more, and as they get their articles published in peer-reviewed journals, their exhilaration will not last long. They may get tenure, but they will not get permanent satisfaction. "For the wise man, like the fool, is not remembered for very long. In the days to

come everything will have been long forgotten. The wise man dies just like the fool dies. So I detested life because all the work done under the sun was evil to me. This was because everything is vapor and an attempt to shepherd the wind" (Ecclesiastes 2:16–17). [North, *Ecclesiastes*, ch. 3] *He who begins with dissatisfaction ends with dissatisfaction.*

A Christian economist should not begin his analysis with dissatisfaction. He should begin his analysis with the biblical doctrine of purpose: God's and then man's. One of man's purposes is to reduce uneasiness, as Mises said. This is not true of God in heaven. But it was true of Jesus in His time on earth. His time in the garden of Gethsemane on the night of His arrest is indicative. "He went a little farther, fell on his face, and prayed. He said, 'My Father, if it is possible, let this cup pass from me. Yet, not as I will, but as you will'" (Matthew 26:39). That was not evidence of discontent. Rather, it was evidence of His uneasiness about the crucifixion. But He decided to accept the will of the Father with respect to this uneasiness. Conclusion: *uneasiness is not the same as dissatisfaction.* Dissatisfaction is a form of discontentment. Discontentment is the way of vapor. It is an attempt to shepherd the wind.

Conclusion

The apostle Paul was adamant about the benefit of being contented. He spoke of it as a gain. It surely is gain. It is a positive sanction. Men should seek this gain in history.

In the new heaven and the new earth, covenant-keepers will not be discontented. But they will still be decision-makers. This is why we must not identify discontentment as the source of human action. People are purposeful when they act to improve their situations. But this is not the same thing as saying that they are discontented with their situations. Perhaps most people are, but they are not supposed to be. It is possible for them to experience contentment in circumstances in which they are experiencing difficulty. They of course would prefer to escape this difficulty, but this does not mean that they despair over their present conditions. They should be looking for ways to serve God better in good times and bad times.

Paul found ways of being contented with his circumstances in life, whether they were positive or negative. He gained the self-discipline that this attitude creates in a person's life. He did not give up. He did not give up because he did not give up hope. There was always hope of deliverance. Even

when he faced death, he had hope in deliverance. Death would be the answer to his hesitancy between being with God and serving the church.

This outlook is favorable to entrepreneurship. There is a necessary optimism for a life of entrepreneurship. People who are discouraged about the prospects of their ventures are not going to start ventures. They are convinced that there is an opportunity for profit from each of these ventures. People who become discouraged after the failure of a single venture are forfeiting opportunities to have successful ventures. The willingness to suffer a public failure and even public humiliation is basic to a life of successful entrepreneurship.

Entrepreneurship can come in many forms. An evangelist is an entrepreneur. A foreign missionary is an entrepreneur. Evangelists and missionaries are optimistic people. This is why they are willing to sacrifice precious time in order to risk setbacks in programs of evangelism and foreign missions. Where this optimism is lacking, evangelism and foreign missions are lacking.

Paul had a vision of victory. That vision of victory was the source of his contentment. His contentment was great gain to him. I concluded his vision of victory was great gain to him as well. He possessed this vision of victory at the beginning of his ministry, which is a ministry of persecution. But because of the intervention of Jesus Christ in his life on the road to Damascus, this transformed his vision of victory as a Pharisee into his vision of victory as an apostle. The letters that he wrote to churches and individuals as an apostle became foundational in the creation of Western civilization. His vision of victory for the kingdom of God was not misplaced.

48

THE CALLING

Now the Lord said to Abram, "Go from your country, and from your relatives, and from your father's household, to the land that I will show you. I will make of you a great nation, and I will bless you, and make your name great, and you will be a blessing. I will bless those who bless you, but whoever dishonors you I will curse. Through you will all the families of the earth be blessed." So Abram went, as the Lord had told him to do, and Lot went with him. Abram was seventy-five years old when he left Haran (Genesis 12:1–5).

As he was walking by the Sea of Galilee, he saw two brothers, Simon who is called Peter, and Andrew his brother, casting a net into the sea, for they were fishermen. Jesus said to them, "Come, follow me, and I will make you fishers of men." Immediately they left the nets and followed him. As Jesus was going on from there he saw two other brothers, James son of Zebedee, and John his brother. They were in the boat with Zebedee their father mending their nets. He called them, and they immediately left the boat and their father and followed him (Matthew 4:18–22).

He went out again by the lake, and all the crowd came to him, and he taught them. As he passed by, he saw Levi son of Alphaeus sitting at the tax collector's tent and he said to him, "Follow me." He got up and followed him (Mark 2:13–14).

Analysis

In these three incidents, we see a pattern. Somebody is productive. He has a good job. He has a stable future. Then, without warning, God calls him away from the way of life that has enabled him to become economically successful.

He gave some powerful promises to Abram. Abram would be the founder of a great nation. People would be blessed in the future because of him. God

promised to bless the people who blessed him. That is a powerful promise. But who was this God? Could he be trusted? Could he deliver on his promises? Abram had to make a decision, just as his father had made a similar decision to leave Ur of the Chaldees along with Abram and his nephew Lot. His father was dead now, and now it was his turn to pull up stakes and move.

The four fishermen were partners. They had enough capital to have a pair of boats. They had tools of production. They were obviously successful. Jesus walks by and calls them to join him. All four of them immediately leave the boats behind. Zebedee had to replace them. He did not know it at the time, but his sons and their two partners would not return as fishermen on the Sea of Galilee. They would become fishers of men, whatever that meant. The four fishermen did not know what that meant, but they were willing to learn.

Then there was Levi. He had a really good occupation in terms of money, although it was a despised occupation among the Israelites. He was a tax collector. As soon as he got the call, he departed from the table at which he had been collecting taxes. There is no indication that he took his money with him. He just left.

These men responded to a call. The call was from God. They had better not pass by the opportunity to join Him. The opportunity was passing by. There was no time to waste. In English, we have a phrase: "He who hesitates is lost." In this case, that was literal.

Consider the outcomes of their decisions. Abram was the founder of a nation. It was the most important nation in the ancient world. Because of the Old Testament, we have a detailed record of that nation. Through the church, that nation persists. People remember the name of Abram; even more remember his new name, Abraham: "father of nations."

Peter became the leading apostle in the Jerusalem church. He also wrote two epistles that have come down through the ages. On the other boat were two brothers: James and John. James wrote an epistle with his name on it. John wrote three epistles, the Gospel of John, and the book of Revelation. As for Levi, we learn from the Gospel of Matthew that his other name was Matthew (Matthew 9:9). He wrote the first book of the New Testament. Only Andrew among the five did not write a document that has survived. These men helped establishe Western civilization. They had far more influence than Plato, Aristotle, or any of the other Greek philosophers had over the next 1200 years.

What if they all had rejected the call? God might have continued to bless their occupations. They were decent men. They were serving consumers effectively. They were benefits to their communities. But, except for immediate family members, no one would have remembered them half a century after they died. They would have joined the ranks of the billions of men and women who are forgotten within a few years of their deaths.

There were prophets in the Old Testament who had been simple men. Elisha was a farmer. He was recruited by Elijah while he was plowing his fields. He was with 12 yokes of oxen, meaning 24 oxen. He was economically successful. Before he joined Elijah as a servant, he sacrificed all of his oxen. He burned his plows to cook the oxen. He gave the meat to locals (I Kings 19:19–21). He severed all ties with the past. He walked away from wealth and a lifelong career. Amos was a shepherd (Amos 1:1). He ceased being a shepherd.

Moses had been a shepherd. He lived in the wilderness. He was successful. His father-in-law was a priest of Midian. Then he saw a burning bush. He was called by God, who spoke out of the bush. He had spent four decades herding sheep. He would then spend the next four decades herding Israelites. What he did changed the world. But there is no indication that he was not a successful shepherd. He might've continued being a shepherd for the next 40 years. But we would not remember his name.

In every case, God called successful people. He called them out of their comfort zones. They had specialized in economic production, and they had found markets for the output of their labor. They all abandoned their occupations. Their jobs had fed them and fed their families. Now they would leave those jobs, never to return.

They were not forced to do this. They were called to do this. They were called by God to do this. That made a difference for them, and it has made a difference for the world. It has made a difference for you.

My point is simple: there is a difference between a man's job and his calling. The job puts food on the table. The job is conventional. The job is predictable. A calling from God also puts food on the table, but there is no visible guarantee of this at the time of the calling. It is not clear what the calling is all about. In the case of the prophets of Israel, the calling was mostly about personal trouble. Their message was not well received by the people or the leaders. The ministry of Jesus is the archetype. His message was not well received by most of the people and all of the leaders with any power. But a remnant responded, and that remnant changed the world.

A. Job and Calling

I define a job or occupation as follows: the work that puts food on your table. I define calling differently: the most important thing you can do in life in which you would be most difficult to replace. The examples that I have provided are case studies of the transition between job and calling. There is no question in my mind that what God called each of those men to do for the rest of their lives was the most significant thing that they could possibly have done. Other people might have done them. We do not know who those people might have been. But we know this much: these men responded to God's call, and the world was never the same again. We remember these men because they did not stick with their jobs. They saw the opportunity of a lifetime, or more to the point, they heard the opportunity of a lifetime, and they responded appropriately.

Another man who heard the call of God was Saul of Tarsus. He became the apostle Paul. He left his job as a persecutor of the church. Jesus literally called him to do this (Acts 9:3–7). But he got a new job. He became a tent maker. Perhaps he was already a tent maker. We don't know. But we know for sure that, while he was an apostle, he made his living by making tents (Acts 18:3). We are told nothing of the quality of his tents. We know nothing about his marketing plans for selling these tents. The information about his tent making is relevant only to the extent that this occupation provided him independence. He was not dependent on the donations of churches. He reminded the church at Thessalonica of this fact. "For you remember, brothers, our labor and toil. Night and day we were working so that we might not weigh down any of you. During that time, we preached to you the gospel of God" (I Thessalonians 2:9). He reminded the church in Corinth of this fact. " We are fools for Christ's sake, but you are wise in Christ. We are weak, but you are strong. You are held in honor, but we are held in dishonor. Up to this present hour we are hungry and thirsty, we are poorly clothed, we are brutally beaten, and we are homeless. We work hard, working with our own hands. When we are reviled, we bless. When we are persecuted, we endure" (I Corinthians 4:10–12). "I have been at hard work and in hardship, in many sleepless nights, in hunger and thirst, often in fasting, in cold and nakedness" (II Corinthians 11:27). He was trying to raise money from the church to support the church in Jerusalem. He indirectly reminded them that he was not taking any money from them. It was a powerful argument. In his

case, his job supported his calling as an apostle. He was self-financed. That is to say, he was customer-financed.

Paul made it clear that the calling of a minister is to be paid for by the church. He said this in the context of his refusal to accept any money from the Corinthian church. "Who serves as a soldier at his own expense? Who plants a vineyard and does not eat its fruit? Or who tends a flock and does not drink milk from it? Do I say these things based on human authority? Does not the law also say this? For it is written in the law of Moses, "Do not put a muzzle on an ox when it is treading out the grain." Is it really the oxen that God cares about? Is he not speaking about us? It was written for us, because the one who plows should plow in hope, and the one who threshes should thresh in the expectation of sharing in the harvest. If we sowed spiritual things among you, is it too much for us to reap material things from you? If others exercised this right from you, do we not have even more? But we did not claim this right. Instead we endured everything rather than be a hindrance to the gospel of Christ" (I Corinthians 9:7–12). [North, *First Corinthians*, ch. 11:A] Yet he kept his day job in order to keep his independence. He did not answer to them. He answered to God and to his customers.

For the record, I have always followed Paul's lead in this regard. I have never taken money for the time that I have invested in writing Christian economics. I invested something in the range of 20,000 hours in writing, and at least 10,000 hours raising money through the Institute for Christian Economics from 1975 until I shut it down in 2001. I never wanted anybody to claim that I was profiting financially from my writing on Christian economics. I did my financial newsletter writing as a way to support myself. This is sometimes necessary if you have a calling for which you cannot get financial support.

It was through discussion with my printer in 1981 that I recognized the distinction between my job and my calling. I did not see it clearly before this. I wrote an article on this for the next issue of my bi-monthly newsletter, *Christian Reconstruction* (March/April). I tried to keep my presentation practical. Here is part of what I wrote.

B. Calling: General and Special

The Bible teaches us that there is a special calling of God to His people. He calls them to faith in Jesus Christ. This involves a turning away from the evil lifestyle of the past. God calls men to a new way of life. He restores them

to full ethical sonship (John 1:12). This is the doctrine of adoption. "Call upon the name of the Lord," is a familiar biblical phrase. Christ said, "No man can come to me, except the Father which hath sent me draw [literally: drag] him: and l will raise him up at the last day" (John 6:44). God calls His people to faith in Christ. This is sometimes called the "effectual call," and it is also referred to as the "special call." It is a call to salvation.

The general calling refers to men in general. Each man is called to subdue the earth to the glory of God (Genesis 1:28). This is a call to labor under the general sovereignty and providence of God. It is man's assignment to exercise dominion. The general calling is a man's vocation ("vocal" or "voice"). A man's vocation is his life's work, a form of service to God, whether he recognizes that he is under God or not.

The general calling took on great significance during the Protestant Reformation. Luther and Calvin stressed that all godly, honest labor is acceptable to God, and that there should be no distinction of an ethical nature between the minister and the farmer. There are functional distinctions, of course, which is why the Bible establishes certain personal requirements for men to serve as church leaders (I Timothy 3), but there is no ethical distinction. No man is more holy in the sight of God because of the kind of job he has.

This doctrine freed men from the psychological suppressant of feeling inferior because of their work. If any man's labor is acceptable to God, then it pays a man to work as well as he can. God honors competence, and grants more competence, to those who humble themselves before Him and who try to improve their performance. A good plumber gains more respect from his work than a lazy preacher. The question relates to diligence, not the kind of work performed.

This is clearly a liberating doctrine. It calls all men to labor hard and honestly. It teaches men that no matter what they do for a living, it is worth doing well. This, in turn, increases economic output, for men strive to work more intelligently and less wastefully. They strive to give a good account of themselves before God, and in doing so, they give a good account of themselves before men. This means greater wealth for all members of the market, for everyone is a beneficiary of efficient labor—everyone except those who are inefficient, lazy, or incompetent, who face greater competition than before. They deserve what they get.

The general calling is universal. All men will be held accountable for their work, and they will be rewarded in heaven, or cursed in hell, in terms

of their general callings (Luke 12:47–48; l Corinthians 3). This kind of moral obligation to work hard and honestly pressures men to improve their performance. It is a form of self-government, and society does not have to impose direct sanctions on men in order to reap the rewards of self-government. The widespread conversion of men to a form of Christianity that preaches the binding nature of the general calling will produce increased wealth per capita in that society. People work harder, and people work smarter.

Which calling?

I have been economically successful so far in my life. Because of my outward, visible success, I am often asked by men, especially younger men, what I think are the rules of financial success in life. The Christians who ask me this question sometimes ask me what I think they ought to do for a living.

I have a stock answer. It relates to the biblical doctrine of the calling. It is not a complicated answer, and most Christians see the truth of my advice. The astounding thing in my mind is that they never have heard anything like it before. No pastor has counseled them. No parent has sat down with them to talk to them about these basic rules of thumb for a Christian's occupation. Here they are:

1. Evaluate your capacities accurately.
2. What is the most important job you can perform?
3. What is the most important job you can perform in which few men can replace you?

A man who has even a vague idea of the answers to these three surveys has a good grasp of what he ought to do with his life. It is not easy to conduct such a survey, but it is vital. God calls each man to make this survey.

Capacities: The more you have, the harder the decision. The man with limited capacities except for one skill has a much easier time of it. He knows what he ought to be doing. But someone who has multiple talents—and this includes most men—has some hard evaluating to do. "What kinds of work appeal to me? What are the ones I do best? What are the ones I would be willing to do for the remainder of my life? What are the ones that I could not stand to do for very long? What skills should I seek to improve, if I am given the opportunity?"

You must be rigorously honest here. You should probably consult others: teachers, parents, pastor, employer, and even a professional testing service, if necessary. You must come to grips with yourself. You must also come to grips with other people's evaluations of you. You will be serving a market, after all. Get used to the idea of having to take seriously other people's opinions of your talents.

Job importance: If a man can do several things well, he will then have to face the problem of meshing his skills with an occupation. If he can speak five foreign languages fluently, what should he do with his talent? Teach school? At what level? Translate for a multinational corporation? Translate for a Federal bureaucracy? Tranlate for a publishing company? Join a Wycliffe Bible translating team? There are several possibilities. Salary levels are only one way to make the decision. There are others.

I tell people to use this rule of thumb in making a decision. Try to peer ahead 40 years, or whenever you think you will be too old to work at this job. When you look back at your life, what will you think of your work? Was it God--honoring? Did you leave a large inheritance behind for your children? Did your children grow up with the moral training to handle their inheritance in a godly way? Did you give a lot of money away to charity? Did you give your life away in service rather than money? Was it a good decision when you accepted this calling as your life's work? If you even try to answer these questions in advance, you are far more likely not to be disappointed when you ask them again in 40 years.

Replaceability: This is something few men consider in advance. They should never stop considering it. It is not enough to select the most important job you can do. You have to ask yourself this question: "If I were to quit, or die, would the job be rapidly filled by someone just as effective as I am, and at the same wage?" If the job is easy to fill rapidly and at the same wage, then the person who now holds it has not distinguished himself by the level of his performance. If a humanist could do a Christian's job just as well, then there is something wrong with the Christian's work. If his work is good, then there is probably some other job that he could do that God wants to have filled by a Christian.

Today, few Christians operate in terms of the doctrine of the calling. They do not think about how important they are, as Christians, in their calling. They do not understand how they should provide unique, exclusively Christian services to their employers. In short, they do not think as Christians.

The job a man does may be important in his own eyes, or in the eyes of others, but if by remaining in what appears to be the most important job, when God could use the same skills to far better advantage in another job, then the employee is wasting his talents. Any man who cannot say that he, as a Christian worker, is not uniquely suited to his job, should consider finding new employment. If he is easily replaceable, then he had better look around and see if there is some other important job available to him in which he would be more difficult to replace.

In short, go where there is not much competition. Go where your presence in the field will elevate that field. Go where you, as a Christian, will generate imitators, even among non-believers. Go where you will have an opportunity to train others in their callings. If you are not now in such a position, but you could be, then you are not in the proper calling. Replaceability is one way of testing your place in life. You do not want to be just another cog in a vast, impersonal economic machine.

C. The Scholar's Calling

It is most common for a scholar to support himself by teaching. With the rise of the universities in the West in the eleventh century, teachers were in a position to become scholars. Most teachers are scholarly, but very few teachers in history have become so dedicated to their academic field that they write books. They do not make major breakthroughs in their fields. They do not define themselves in terms of their scholarship meaning their unique discoveries. They define themselves and their lives in terms of being advanced teachers.

The scholar sees his work differently. He believes that what he is researching and publishing has the potential of changing the opinions of people within his field. In very rare circumstances, the scholar may believe that he will have influence outside of the academic world, meaning outside his own chosen academic discipline. In extremely rare circumstances, scholars do have influence outside their fields. They work in their studies, they spend time in libraries, they teach a handful of students, very few of whom are interested in the field, and they publish something that will have influence in literary circles, intellectual circles, and even politics.

In very rare cases, a scholar may operate outside of the academic world. He has influence inside the academic world, and he may even have influence outside the academic world. In modern times, by far the most influential

scholar who was not part of the academic establishment was Karl Marx. He earned a Ph.D. in philosophy in 1841 with a doctoral dissertation on the philosophy of Democritus and Epicurus. He went into journalism immediately after receiving his doctorate, and he never left journalism. He never had a full-time job except as a journalist. He spent many years studying economic documents in the British Museum. His doctoral dissertation was published in 1902, but only because he had become the philosopher of Communist revolution. It had no influence at all.

A similar figure in the United States was Henry Adams. He was the grandson of the President of the United States, John Quincy Adams, and the great-grandson of President John Adams. He held various government posts, and he was a part-time journalist. He taught medieval history at Harvard from 1870 to 1877, but he retired at age 39. He wrote a nine-volume history of the presidential administrations of Jefferson and Madison, which is still regarded as a reliable source for modern historians to quote. He wrote a book for his nieces in 1904, *Mont Saint Michel and Chartres*. It was released to the public only in 1913. It is regarded as a classic. He also wrote one of the most influential autobiographies in American history, *The Education of Henry Adams*, which was self-published in 1907. Until after his death in 1918, only about 1,000 copies were printed. It was named by Modern Library as the best English-language nonfiction book of the twentieth century. (I have read it twice. I do not concur with this assessment.) He did not want publicity. But he had grudging respect for scholarship.

Another figure like him was W. H. Lewis. He lived on a small pension from his service in World War I. He lived close to Oxford University and later Cambridge University. He used these great libraries to research late-seventeenth-century French history. He wrote a series of history books that are well respected in the field, including *The Splendid Century: Some Aspects of French Life in the Reign of Louis XIV* (1953) and *The Sunset of the Splendid Century: The Life and Times of Louis Auguste de Bourbon, Duc de Maine* (1955). I was well aware of Lewis when I was in graduate school in the late 1960s. What I did not know until two decades later is that Lewis was "Warnie" Lewis, the older brother of C. S. Lewis. He took notes on the meetings of the Inklings' club: literary sessions held at a local pub. The group included J. R. R. Tolkien..

Then there are scholars who are on the fringes of the university system. Ludwig von Mises received his doctorate in 1906. He was not hired to

be a professor at the University of Austria. He spent the next three decades as a senior researcher for the Austrian Chamber of Commerce. His influence came from his books, especially *Socialism* (1922). He had great influence on dozens of younger scholars, some of whom journeyed to Vienna to become part of his circle of disciples. This was common in Vienna in the early decades of the twentieth century. As a Jew, he fled Austria in 1934 to take a position at the Graduate Institute of Geneva. He feared that Hitler would eventually take over Austria, which he did in 1938. He fled Switzerland in late 1940, racing across France in a bus a few hours ahead of invading German troops, headed for neutral Spain. He came to the United States. He received a teaching position at New York University's Graduate School of Business Administration in 1945, which he held until 1969. But the university never paid him. He was listed as a visiting professor. He was funded by a few rich donors who appreciated his work. He did guide four men who received doctorates in these years. He also trained a number of brilliant young men who audited his evening weekly seminar. The most famous was Murray Rothbard. He had virtually no influence on academia after he left Austria. Yet from his first book in 1912, *The Theory of Money and Credit*, until his final major book in 1962, *The Ultimate Foundation of Economic Science*, he remained committed to scholarship. He defined himself in terms of his scholarship. He believed above all in the power of ideas to shape society. This is the mark of the scholar, in contrast to the university teacher.

There have been self-taught scholars laboring completely outside of academia because they did not have doctorates. The Austrian polymath, Erik von Kuehnelt-Leddihn, never held a position. He spoke multiple languages, and he visited every continent except Antarctica every year giving lectures. He was a remarkable scholar. But he had influence only in American conservative circles. R. J. Rushdoony had a similar career. He was never granted a teaching position. His views were too conservative for small Protestant colleges that might have hired him. His influence came through his books. He labored in obscurity, reading 200 to 300 books a year, from his years as a missionary on an Indian reservation from 1945 until 1955. His first book was published in 1959. But from 1963 until 1973, his numerous books had considerable impact in Christian academic circles. It was only because of a small publishing house, Presbyterian and Reformed, that he reached an audience. My own experience has been similar. I taught full-time for only one

semester at the college level in the fall of 1979. I also taught an evening class twice a week at a community college in Oregon in the fall of 1974. My doctorate was not in economics; it was in history. I chose not to remain in academia after 1979. I was making too good a living as a newsletter publisher, and I realized that I could have influence by publishing my own books and the books of other Christian scholars.

Conclusion

This chapter is something of a digression: less economic theory, more anecdotes. That is because the calling is not governed by "high bid wins." It is "highest service wins." Money is not central to most callings. Sometimes, there is more outflow of time or money than inflow. There is an element of charity about a calling.

This book is essentially a recruiting manual. It is a very long recruiting manual. You should be aware of the price that you will be asked to pay if you accept a life of scholarship as your calling. If you hold the views that I have expressed in this set of volumes, you will be on the fringes of academia at best—at least in the early stages of this process of intellectual reconstruction. You must be sufficiently committed to the idea of the long-term influence of ideas in order to make the required commitment.

If you can find a salaried position that will serve as your job, meaning a job that will not require more than 40 hours a week, thereby leaving time for your life of scholarship, you should consider accepting it. If the job is in some way related to scholarship, such as a teaching position in a university, all the better. But if that position requires you to de-emphasize or even eliminate all references to your scholarship, because your scholarship rests on principles that are alien to the institution that hires you, you will be compromised throughout your career. I do not recommend this.

Mises was able to teach his uniquely anti-establishment economic theory on the NYU campus because he was not actually being paid by the university. He offered free labor. "Free market, free labor, and free speech." Also, one of his major financial supporters, Lawrence Fertig, was on the Board of Trustees of the university. So, the administration let him teach in the Graduate School of Business, which was geographically separated from the main campus. There was no communication between him and the economics department of the university. The faculty members were hostile to his brand of economics.

It was a strange fact that another Austrian economist, but not an Austrian School economist, Peter Drucker, was teaching on the main campus at the same time that Mises was teaching in the business school: 1949–1971. They seem never to have communicated. Drucker was the most influential philosopher of business management in the twentieth century. He created the field. He was able to combine his academic job and his scholarly calling as few other academics in modern history ever have. He was also highly influential as an advisor to large business corporations for 50 years, 1950–2000. He made a lot more money as an advisor than he made as a professor. He wrote 39 books, and they sold very well. But he was not out of step philosophically or economically with American academia.

With the development of the World Wide Web after 1995, scholars can now communicate with the general public apart from the intermediaries of humanistic book publishing houses and humanist universities. If a scholar can communicate effectively through online videos, e-letters, and a website, he does not need the distribution system that prevailed until 1995. The world has opened up to scholars as never before. But to take advantage of this, they must communicate with intelligent laymen. These are the people who will shape the future.

I find myself in agreement with Drucker. This is on the website of the Drucker Institute.

> INTERVIEWER: What, then, has inspired your books more than anything?
>
> DRUCKER: The same thing that inspires tuberculosis. This is a serious, degenerative, compulsive disorder and addiction.
>
> INTERVIEWER: An addiction to writing?
>
> DRUCKER: To writing, yes.

Writing is my job, my calling, and my life. It began as a minor affliction in 1960, at about the time that I began thinking about this project. I began writing for the college newspaper. I have never stopped. I of course cannot match the master, Jacob Neusner. (http://bit.ly/BooksNeusner) No one can. But I wish I could . . . except for the indexing.

49

BRIDE PRICE

If you buy a Hebrew servant, he is to serve for six years, and in the seventh year he will go free without paying anything. If he came by himself, he must go free by himself; if he is married, then his wife must go free with him. If his master gave him a wife and she bore him sons or daughters, the wife and her children will belong to her master, and he must go free by himself (Exodus 21:2–4).

Analysis

This passage begins the case laws of Exodus. These laws were applications of the Ten Commandments, which are recorded in Exodus 20. The case laws fill Exodus 21–23. I devote the third and fourth volumes of my commentary on Exodus, *Authority and Dominion*, to this section of Exodus. This Analysis section was published in Volume 3 as an introduction to Chapter 31: "Servitude, Protection, and Marriage." This chapter introduced the concept of the bride price, which was the payment by a bridegroom to the father of the bride. The father then transferred this money to his daughter as her dowry. It was her permanent possession. It protected her in case her husband either died or left her. Payment to the father proved that the bridegroom had capital.

Verse 3 is clear: a married man who goes into indentured servitude, probably because of an unpaid charitable debt, takes his wife with him. She therefore departs with him when he goes out. Verse 4 is the difficult section for moralists. If he had been given a wife during his period of servitude, she and their children must remain behind with the master when the husband leaves.

The key question we need to ask ourselves is this: Where had the indentured servant received his wife if he originally brought her into the master's household? The answer is crucial to understanding this passage: from her father. *He would have had to pay a bride price to her father*, thereby indicating his economic productivity, or at least his position as a man possessing

inherited capital. The bridegroom's payment of a required bride price is the key to understanding this case law.

The bride price would normally have been less than 50 shekels of silver. A man who seduced an unbetrothed virgin was required by law to pay 50 shekels to her father, and then marry her, with no future right of divorce (Deuteronomy 22:28–29). Additional evidence of this 50-shekel maximum: the bridegroom who falsely accused a new bride of not being a virgin at the time of their marriage, and who could not prove his accusation, had to pay 100 shekels of silver to her father (Deuteronomy 22:19). This was double restitution: two times 50.

1. To Give a Wife

Jacob wanted to marry Rachel. He had no visible, transferable capital, for he was a fugitive, even though he had received Isaac's blessing. Without an assured inheritance, he had to pay Laban a bride price. That bride price was seven years of labor (Genesis 29:20a). His words at the end of this period of service are significant: "Give me my wife, for my days have been completed—so that I may marry her!" (Genesis 29:21b). Give me my wife, he insisted. The father had to give his daughter to the bridegroom, once the bridegroom had met the terms of the bride price. Rachel now belonged to Jacob. He had paid the price.

Exodus 21:4 reads: "If his master gave him a wife and she bore him sons or daughters, the wife and her children will belong to her master, and he must go free by himself." The language is the same as Jacob's to Laban: he has given her to him. This raises a second crucial question: Where did the master get a woman for his servant in order to be able to give her to him in marriage? Either she was a servant already owned by the master, or else she had been purchased by the master for the servant. Perhaps she had been some other family's servant. Perhaps she had been the daughter of a free man. The point is, the master now lawfully controls her as a lawful father. He can therefore give her to his servant.

If she had been the daughter of a free man, then the master would have had to pay a bride price to her father. This assured the father that the man who was taking *legal authority over his daughter* was competent financially. The father had been given economic evidence that the requested transfer of authority over his daughter to another man posed no threat to her economic future. The bride price served as evidence of her future hus-

band's ability to support her; as a weaker vessel, she was legally entitled to such support.

If the master paid the bride price, and her father transferred to him the right to give her in marriage, then the master became her new father, *covenantally* speaking. He would remain legally responsible for her until she married a legally independent man. The master had the legal right to give her as a wife to a servant in his household, but only because she would remain in his household. He could not legally transfer to a servant the economic obligation to support her, for *the servant was not a covenantally free agent*, either economically or legally. Because the servant possessed no capital, the master remained her father covenantally until such time as the servant purchased her from him, that is, *until he paid the master the bride price owed to a father.*

This law provided additional assurance to the woman's natural father of the lifetime economic protection owed to his daughter. The master did not have the legal authority to transfer this economic responsibility to a former indentured servant until the latter had proven that he was able to pay the same bride price originally owed to the father. If this law had not been in existence, or if it was unenforced by civil law, then there would be no guarantee to the woman's natural father that the master would not later decide to escape his economic liabilities to the woman by transferring such responsibility to a former indentured servant who had not yet demonstrated his economic competence. The legal requirement that the released servant pay the master the bride price before his wife could leave the household of the master was the natural father's assurance of her continuing protection.

The modern world has pretended that it can somehow ignore the economic aspects of marriage. People assume that the ancient world was primitive, and therefore the attention given by ancient law codes to such matters as dowries and bride price payments is evidence of this primitivism. But it is the modern world that is primitive, for it has abandoned a covenantal view of marriage, and has substituted easily broken mutual contracts, where fathers have no responsibilities to investigate the economic competence of prospective sons-in-law, and wives have little legal protection from the courts if husbands decide to break their marriage contracts. Women have become the economic victims of divorce.

2. The Family as the Primary Protection Agency

Marriage is not lawless. It is a covenantal institution. It is the primary training ground for the next generation. It is the primary institution for welfare: care of the young, care of the aged, and education. It is the primary agency of economic inheritance. The family is therefore the primary institutional arrangement for fulfilling the terms of the dominion covenant (Genesis 1:27–28). God honored this crucial dominion function of the family by placing restrictions on it. A servant is expected to defer marriage until he is an independent man. Later, as a husband in a position of authority, he can exercise dominion under God as the head of his family. The model here is Jacob (Genesis 29:20).

Both marriage and labor are normally to be part of the dominion covenant between man and God. Because the servant's dominion over his assigned portion of the earth is not independent of his master's authority, his authority over a wife taken during his term of service is also under his master's authority. There is a human mediator between God and the servant: the master. Therefore, it is the master, not the servant, who is directly responsible to God for the general care of the servant's wife. The servant takes orders from the master.

The servant's protection comes from the master. The capital at his disposal comes from his master. He takes orders directly from his master or a representative of the master. If he is a foreman himself, he issues orders only as a representative of his master, because he is acting as an official under the master's general authority. The master is responsible before God for any delegation of authority to a servant, so the mediatorial position of the master is not abrogated simply because he turns limited authority over to the servant.

This law made it clear to any woman who married a Hebrew indentured servant that the ultimate human authority over her, and therefore her legal protector, was not her husband but rather her husband's master. She was fulfilling the terms of the dominion covenant as a wife within a family unit, but the head of her family was her husband's master. Her husband was therefore only a representative of the head of her family. The covenant of marriage was in this instance four-way: (1) God, (2) the master of the house, (3) the indentured servant, and (4) the servant's wife. Because the protection of the wife and children was ultimately the legal responsibility of the

master, the servant's wife and the children remained with the master when the husband, now released, departed.

No biblical text explicitly specifies a right of redemption by the husband if the wife was owned by a Hebrew master. Nevertheless, such a legal right is an inescapable conclusion of Exodus 21:7–8: "If a man sells his daughter as a female servant, she must not go free as the male servants do. If she does not please her master, who has designated her for himself, then he must let her be bought back. He has no right to sell her to a foreign people. He has no such right, since he has treated her deceitfully." The Hebrew daughter could be bought and sold as the Hebrew manservant could be. She could become a maidservant (Deuteronomy 15:12). She could also be purchased by means of a bride price, that is, to become a wife. Her father could not legally abolish the God-given judicial, covenantal office of father; he could only transfer this office to another man who was promising to become her future husband or her future father-in-law. This transfer of office was legally possible only because *marriage is judicially a form of adoption.*

A. God Adopted Israel

Ezekiel 16 is the great chapter on God's adoption of the nation of Israel. Ezekiel described Israel as an abandoned child born of an Amorite father and a Hittite mother. "No eye had compassion for you to do any of these things for you, to be compassionate toward you. On the day that you were born, with loathing for your life, you were thrown out into the open field" (v. 5). God was gracious to this abandoned baby. This was an act of adoption. When Israel grew to maturity, God in his grace married Israel. "So I washed you with water and rinsed your blood off you, and I anointed you with oil. I dressed you in embroidered clothes and placed leather sandals on your feet. I wrapped you with fine linen and covered you with silk. Next I adorned you with jewelry, and I put bracelets on your hands, and a chain around your neck. I put a nose ring in your nostrils and earrings in your ears, and a beautiful crown on your head. So you were adorned with gold and silver, and you were dressed in fine linen, silk, and embroidered clothes; you ate fine flour, honey, and oil, and you were very beautiful, and you became a queen" (vv. 9–13). This is the description of a bridegroom who pays an enormous dowry to the bride. He does not pay her father. That is because she is the abandoned bastard daughter of Canaanites. He pays her out of his own resources.

Israel then became faithless: a prostitute. Israel wasted the dowry. "You took the fine jewels of the gold and silver that I gave you, and you made for yourself male figures, and you did with them as a prostitute would do" (v. 17). It was the worst kind of waste. Israel created idols with the precious metals. God then promised to bring Israel under negative sanctions. But the sanctions would not be permanent. "Then I will calm my fury against you; my anger will leave you, for I will be satisfied, and will no longer be angry" (v. 42).

The New Testament teaches that Israel rebelled again. The ultimate rebellion was the crucifixion of Christ. God brought final sanctions on the nation of Israel in A.D. 70, when the Romans surrounded the city, broke down its walls, and burned the temple. That ended the temple sacrifices forever. Having divorced Israel in full public view, God the Father then sought a new bride for his Son. That bride was the church. This is why Paul refers to the church as the Israel of God (Galatians 6:16).

B. The Bridegroom

Matthew 25 is devoted to the final judgment. It offers two parables: the parable of the ten virgins (vv. 1–13) and the parable of the three stewards (vv. 14–30). It ends with a description of the final judgment: the separation of the sheep from the goats (vv. 31–45). Here is the parable of the ten virgins.

> The kingdom of heaven will be like ten virgins who took their lamps and went to meet the bridegroom. Five of them were foolish and five were wise. For when the foolish virgins took their lamps, they did not take any oil with them. But the wise virgins took containers of oil along with their lamps. Now while the bridegroom was delayed, they all got sleepy and slept. But at midnight there was a cry, 'Look, the bridegroom! Go out and meet him.' Then all those virgins rose up and trimmed their lamps. The foolish said to the wise, 'Give us some of your oil because our lamps are going out." But the wise answered and said, 'Since there will not be enough for us and you, go instead to those who sell and buy some for yourselves.' While they went away to buy, the bridegroom came, and those who were ready went with him to the marriage feast, and the door was shut. Afterward the other virgins also came and said, 'Master, master, open for us.' But he answered and

> said, 'Truly I say to you, I do not know you.' Watch therefore, for you do not know the day or the hour (Matthew 25:1–13).

It is clear that the bridegroom is Jesus Christ. In other New Testament passages, Christ is described as the bridegroom. John the Baptist was baptizing people when Jesus' ministry began. His disciples came to him with a question. "Rabbi, the one who was with you on the other side of the Jordan River, about whom you have testified, look, he is baptizing, and they are all going to him. John replied, "A man cannot receive anything unless it has been given to him from heaven. You yourselves can testify that I said, 'I am not the Christ,' but instead, 'I have been sent before him.' The bride belongs to the bridegroom. Now the friend of the bridegroom, who stands and hears him, rejoices greatly because of the voice of the bridegroom. This, then, is my joy made complete. He must increase, but I must decrease" (John 3:26b–30). Paul wrote to the church at Ephesus: "Husbands, love your wives, as Christ loved the church and gave himself up for her. Christ gave himself for the church so that he might make her holy, having cleansed her by the washing of water with the word, so that he might present her to himself as glorious, without stain or wrinkle or any such thing, but holy and without fault" (Ephesians 5:25–27). Christ is the bridegroom. The church is the bride. John wrote of the world beyond the grave: "Then I saw a new heaven and a new earth, for the first heaven and the first earth had passed away, and the sea was no more. I saw the holy city, new Jerusalem, that came down out of heaven from God, prepared like a bride adorned for her husband" (Revelation 21:1–2). This follows the wedding celebration or marriage supper of the lamb "'Let us rejoice and be very happy and give him the glory because the wedding celebration of the Lamb has come, and his bride has made herself ready. She was permitted to be dressed in bright and clean fine linen' (for fine linen is the righteous acts of the saints). The angel said to me, 'Write this: Blessed are those who are invited to the wedding feast of the Lamb.' He also said to me, 'These are true words of God'" (Revelation 19:7–9).

Jesus' role as the bridegroom of the church is central to His role as Redeemer. God selects the members of Christ's church. Then He redeems them by grace. "God raised us up together with Christ, and God made us sit together in the heavenly places in Christ Jesus, so that in the ages to come he might show to us the immeasurably great riches of his grace expressed in his kindness toward us in Christ Jesus. For by grace you have been saved

through faith, and this did not come from you, it is the gift of God, not from works and so no one may boast. For we are God's workmanship, created in Christ Jesus to do good deeds that God planned long ago for us, so that we would walk in them" (Ephesians 2:6–10).

The bridegroom has a bride. The bride is the church. The history of mankind ever since the fall of man has been the story of the purification of the church. This purification is ethical. Paul wrote to the church at Corinth: "I wish that you could put up with me in some foolishness. But you are indeed putting up with me! For I am jealous about you. I have a godly jealousy for you, since I promised you in marriage to one husband. I promised to present you as a pure virgin to Christ. But I am afraid that somehow, as the serpent deceived Eve by his craftiness, your thoughts might be led astray away from a sincere and pure devotion to Christ" (II Corinthians 11:1–3). This is what he meant when he wrote of the church as being "without stain or wrinkle or any such thing, but holy and without fault" (Ephesians 5:27). There is a process of ethical sanctification here. Theologians call this progressive sanctification. This process leads to final sanctification. This will take place at the end of time: the wedding supper of the lamb, which will follow the final judgment.

C. Bride Price and Dowry

Parts of this section appear in Chapter 22 of *Authority and Dominion*: "Wives and Concubines." My discussion is far more detailed there.

The death of Christ on the cross paid a ransom. "For the Son of Man did not come to be served, but to serve, and to give his life as a ransom for many" (Mark 10:45). "For there is one God, and there is one mediator for God and man, the man Christ Jesus. He gave himself as a ransom for all, as the testimony at the right time" (I Timothy 2:5–6). "You know that it was not with perishable silver or gold that you have been redeemed from the foolish behavior that you learned from your fathers. Instead, you have been redeemed with the precious blood of Christ, who was like a lamb without blemish or spot" (I Peter 1:18–19). Jesus did not pay this ransom to Satan. He paid it to God the Father. It was paid in full at Calvary. It was definitive. This definitive payment has led to a progressive expansion of the final inheritance of the church as the church accumulates wealth, especially wisdom, the most valuable of assets. This expansion will continue until Christ's final payment to God takes place at the end of time (I Corinthians 15:24–

28). [North, *First Corinthians*, ch. 17] In the meantime, God is owed all of the productivity of mankind. This is an implication of the dominion covenant. It is taught in the parables of the talents and the minas.

What has Christ's payment of the ransom to God got to do with the Old Covenant's bride price system? It has to do with the recipient of grace. The recipient is the church. The church, meaning all redeemed people, survives in history only because of Christ's payment of the ransom. The church is called the bride of Christ. It is this office of bride that is the basis of the connection between the payment of the ransom and the payment of the bride price.

There was a covenantal reason in the Old Testament for this economic obligation on the part of a bridegroom. The father of the prospective bride represented God to his daughter. This covenantal authority before God—this position as God's representative to his daughter—had to be lawfully transferred from the father to the bridegroom. By paying the bride price to her father, the bridegroom ritually swore to a lifetime of faithfulness to his wife as God's representative over her, faithfulness comparable to what her father's faithfulness to her had been. This is precisely what Jesus swore to God the Father in His role as the cosmic Bridegroom. He paid the price at Calvary. God then transferred all authority over heaven and earth to Christ as His lawful representative (Matthew 28:18–20).

By the payment of the bride price, the groom was also acknowledging that he was capable of being as good a supporter of the girl as her father had been. He needed to assure her family of her future economic protection, thereby releasing her father and brothers from this legal responsibility. His ability to follow through on this covenantal guarantee was revealed by his ability to pay the bride price. The bride price was therefore an economic screening device for the family of the girl. The bridegroom's ability to pay a bride price was evidence of his outward faithfulness to the terms of God's covenant. The parents were transferring legal responsibility to a new covenantal head. They were participating in the establishment of a new family. Thus, the in-laws had to serve as God's agents. The bride price was also a sign of the bridegroom's future-orientation and self-discipline. Because Jacob came without capital into Laban's household, he first had to work for Laban as a servant for seven years in order to prove his capacity to lead his own household. To lead covenantally, you must first follow. To rule, you must also have served. Dominion is by covenant, and covenants are always hierarchical.

The bride price compensated the father for the expense of the daughter's dowry. From a purely economic standpoint, the dowry could have been delivered directly from the bridegroom to the daughter. Why did God require this seemingly unnecessary intermediate step, the payment of the bride price to the father? Because the formal transfer of the bride price to her father pointed to the bridegroom's requirement of covenantal subordination to her father.

The church needs a dowry. Every bride does. The language of Ezekiel 16 applies to the church. The New Testament church was the outcast of Israel. The gentiles were outcasts. The church had no wealth of its own that would satisfy God. The church could not provide its own dowry. Whatever the church has ever had, it has had only on the basis of the grace of God.

Jesus Christ paid the bride price to God through His death at Calvary. This is the basis of His marriage to the bride, the church. The marriage supper of the Lamb must be preceded by the payment of a bride price. The church is a wife. The church is not a concubine. The concubine had no dowry. The church does have a dowry. But where did you get this dowry? Biblically, it has to come from the father. But the father gets the dowry from the bridegroom. The payment of the dowry marks the bridegroom as the responsible individual who is now taking responsibility for the bride.

In I Corinthians 15, Paul presents information on the final judgment. This judgment comes only after Christ has extended dominion across the face of the earth. He has subdued his enemies. "Then will be the end, when Christ will hand over the kingdom to God the Father. This is when he will abolish all rule and all authority and power. For he must reign until he has put all his enemies under his feet. The last enemy to be destroyed is death. For 'he has put everything under his feet.' But when it says 'he has put everything,' it is clear that this does not include the one who put everything in subjection to himself. When all things are subjected to him, then the Son himself will be subjected to him who put all things into subjection under him, that God may be all in all" (vv. 24–28).

Paul did not say what takes place next. But it is obvious what will take place next. We know from the book of Revelation what follows: the marriage supper of the Lamb. But this must be preceded by Christ's payment of the bride price to God the Father. What Paul describes is the bride price. It is the whole world, and this world is redeemed. It is the whole world after the last enemy has been defeated: death. This has to be a description of the final

judgment. This is the completion of the dominion covenant for history. This is the bride price.

What did the father in the Old Testament do with the bride price? He turned it over to the bride. It was the bride's protection. In this case, it is the bride's inheritance. It did not come from the bride. It came from the father of the bridegroom. The bride price for Israel was not paid by Israel's father. Israel's father was an Amorite. He had no legal standing to be a covenantal father. He had abandoned his daughter. The same is true of the many fathers of the bride of the church. From all over the world, members have been adopted. Jesus' payment of the bride price at Calvary was paid to the Father. The Father holds it in trust for the bride. It is held in trust until the marriage supper of the Lamb.

D. Israel's Forfeited Dowry

Israel had two dowries in A.D. 70. The first was the covenant with Abraham. It included the promise of specific land. "I will establish my covenant between me and you and your descendants after you, throughout their generations for an everlasting covenant, to be God to you and to your descendants after you. I will give to you, and to your descendants after you, the land where you have been living, all the land of Canaan, for an everlasting possession, and I will be their God" (Genesis 17:7–8) . The second was God's promise to protect Israel and restore the nation to the land after any captivity. The clearest and most rhetorically powerful announcement of this is the song of Moses (Deuteronomy 32). [North, *Deuteronomy*, ch. 76]

The covenant was central to both promises. The covenant included the law. This law was written. The covenant also included the written history of God's dealings with the nation of Israel. This written history was a testimonial to the reliability of God's covenant promises and prophecies in history. He is the God of history.

With the fall of Jerusalem, God visibly broke His covenant with Israel. He destroyed the temple and its sacrifices. Soon after, the Romans removed large segments of the population from the land, which was an old tactic of Middle Eastern empires. The Jews revolted a second time in 132–35: Bar Kochba's revolt. The Romans scattered the remaining Jews across the empire: the diaspora.

Without the temple's sacrifices, a new order was imposed on Israel by the Jewish leaders after A.D. 70. The Pharisees replaced the Sadducees. The

Sadducees had been associated with the temple sacrifices. The Pharisees had been masters of the oral law, developed mainly in Persia during the captivity. We know this as the Babylonian Talmud. This was a new religion: Judaism.

There were now two religions that claimed divine authority in the name of the God of the Bible. Both religions claimed ownership of the written text that Christians call the Old Testament. Both claimed to be the lawful heirs of Abraham, Isaac, Jacob, Moses, and David. This is why the Gospels of Matthew and Luke provide genealogies tracing Jesus back to Abraham through David. Both claimed to represent the God of the Bible covenantally in history. Both denied the legitimacy of the other religion's claims.

The New Testament's revelation of Jesus as the bodily incarnation of the Second Person of the Godhead and therefore as the Creator and the Redeemer of Israel is crucial to a proper understanding of redemptive history. The doctrine of the church as the bride of Christ is the covenantal foundation of the doctrine of the divorce of Old Covenant Israel. Christ is not a bigamist. Therefore, He lawfully divorced Israel.

This raises a question. What happened to Old Covenant Israel's dowry in A.D. 70? Biblically, the promise of the land of Canaan/Israel ended. Neither Christianity nor Judaism has a legal claim to the land of Palestine that supposedly is lawfully grounded in God's promise to Abraham. The church has a far greater inheritance: the whole earth. Jesus said: "Blessed are the meek, for they will inherit the earth" (Matthew 5:5). [North, *Matthew*, ch. This means meek before God. This was Jesus' strategy of world conquest. "The kings of the Gentiles are masters over them, and the ones who have authority over them are referred to as those who do good to their people. But it must not be like this with you. Instead, let the one who is the greatest among you become like the youngest, and let the one who is the most important become like the one who serves. For who is greater, the one who sits at the table, or the one who serves? Is it not the one who sits at the table? Yet I am among you as one who serves. But you are the ones who have continued with me in my temptations. I give to you a kingdom, even as my Father has given a kingdom to me, that you may eat and drink at my table in my kingdom, and you will sit on thrones judging the twelve tribes of Israel" (Luke 22:25–30). [North, *Luke*, ch. 51.]

Old Covenant Israel used the Roman legal system to execute Jesus. Jesus used the Roman legal system to execute Old Covenant Israel. This was

fitting. "So when Pilate saw that he could not do anything, but instead a riot was starting, he took water, washed his hands in front of the crowd, and said, 'I am innocent of the blood of this innocent man. See to it yourselves.' All the people said, 'May his blood be on us and our children.' Then he released Barabbas to them, but he scourged Jesus and handed him over to be crucified" (Matthew 27:24–26). That negative sanctions of that self-maledictory covenantal oath were imposed by God in A.D. 70. Old Covenant Israel died. This is why it has always been illegitimate for Christians to seek revenge against Jews in the name of that oath. It is no longer covenantally binding. Nor is the marriage oath between Christ and Israel. The adulterous partner was executed by the civil government that God had placed in authority over Israel. Israel rebelled militarily, and it did not survive.

As the victimized husband of Israel, Jesus transferred the covenantal dowry from lawfully divorced and lawfully executed Old Covenant Israel to the church. This included the written text of the Old Testament. It also involved an extension of the promise of land to Abraham. The promise was extended to the whole world. On what legal basis did Jesus do this? On the legal basis of His status as the Creator. "The earth is the Lord's, and its fullness, the world, and all who live in it. For he has founded it upon the seas and established it on the rivers" (Psalm 24:1–2). [North, *Psalms*, ch. 5]

E. The Church's Inheritance

The church is made up of former covenant-breakers. In this, the church is no different from what Israel had been. God adopted Israel. God adopted the church. It was an act of grace.

The book of Revelation describes the end of history. It uses the language of a marriage supper. It is the marriage supper of the Lamb. "Then I heard what sounded like the voice of a great number of people, like the roar of many waters, and like loud crashes of thunder, saying, 'Hallelujah! For the Lord reigns, the God who rules over all. Let us rejoice and be very happy and give him the glory because the wedding celebration of the Lamb has come, and his bride and has made herself ready. She was permitted to be dressed in bright and clean fine linen' (for fine linen is the righteous acts of the saints). The angel said to me, 'Write this: Blessed are those who are invited to the wedding feast of the Lamb.' He also said to me, 'These are true words of God'" (Revelation 19:6–9). The remainder of Revelation 19 and half of Revelation 20 are devoted to the final confrontation between God and

Satan. Then comes Revelation 21, the post-resurrection era. "Then I saw a new heaven and a new earth, for the first heaven and the first earth had passed away, and the sea was no more. I saw the holy city, new Jerusalem, that came down out of heaven from God, prepared like a bride adorned for her husband" (vv. 1–2). "One of the seven angels came to me, the one who had the seven bowls full of the seven last plagues, and he said, 'Come here. I will show you the bride, the wife of the Lamb.' Then he carried me away in the Spirit to a great and high mountain and showed me the holy city Jerusalem coming down out of heaven from God" (vv. 9–10). This is post-resurrection: "The one who conquers will inherit these things, and I will be his God, and he will be my son. But as for the cowards, the faithless, the detestable, the murderers, the sexually immoral, sorcerers, idolaters, and all liars, their place will be in the fiery lake of burning sulfur. That is the second death" (vv. 7–8). The language is clear. *This is a matter of inheritance*. Covenant-keepers inherit; covenant-breakers are disinherited for all eternity.

Paul made it clear that this transfer of payment at the end of time is the completion of the bride price. The initial price was paid at Calvary. In other words, title was transferred to God the father, but title has to be reclaimed by the church in history. This is the meaning of the dominion covenant. Through the grace of God, the church buys back the world. But it does so only in the name of Christ. The church works through history to redeem the world, but this is done only by the grace of God. Jesus has empowered the church, and the Holy Spirit has guided the church. Everything that the church possesses, it possesses only as a steward possesses anything. In the day of reckoning, the stewards must give an account of their stewardship. All of mankind must do this. We know from the parables of the talents in the minas that God will impose final sanctions. All that the church does, it does in the name of God and on behalf of God. Jesus is the property owner who does the final reckoning. He collects what is His, but then He transfers wealth to the profitable stewards. This is post-final judgment. The wealth goes to the stewards. The stewards are members of the church. The stewards are part of the bride of Christ.

The combination of the imagery of the stewards and the imagery of the bride provides us with an understanding of the inheritance. The post-judgment inheritance is the whole world, but a world redeemed. It is a world without the presence of covenant-breakers. It is a sin-free world. This is the eternal dowry of the church.

This dowry is valuable. It is the completed development of the capital that God gave to mankind in the Garden of Eden. This is the inheritance of the church, and of members of the church, that they will use to extend dominion in the world beyond the final judgment. There will be plenty to do. God is infinite. Men must examine the relationship between an infinite God and the creation. This is not a world devoid of increasing knowledge. But increasing knowledge must be applied knowledge if it is to be meaningful. It is not knowledge for its own sake. It is knowledge for dominion's sake. It will not end when sin disappears in the post-judgment world. It would not have ended in Eden if the serpent's temptation had been rejected by Adam and Eve. There was lots that could be done. If they had participated in a communion meal at the tree of life, that would have been the beginning of the process of dominion. Dominion was not empowered by sin. It was hampered by God's judgment on this sin. In the world beyond the final judgment, the process of dominion will no longer be hampered by God's judgment on sin. There will be no sin.

The church is the bride of Christ. The dowry is held in trust by God the Father, but it has been paid by Jesus Christ. It was paid by his resurrection and ascension to the right hand of God. Where else could it have come from?

F. Eschatology

Once we understand the economic function of the dowry, and once we understand that the Bridegroom pays the Father the money that constitutes the dowry, we begin to understand the importance of eschatology in our understanding of the development of Christendom. The extension of the kingdom of God in history is by evangelism. This leads to comprehensive redemption, meaning the redemption of institutions. It means the transformation of the world through voluntary exchange. The church in the broadest sense does this as God's steward in history. This is both judicial, meaning trusteeship, and economic, meaning stewardship. It is done through the extension of biblical law into every nook and cranny of the world. It is done through the power of the Holy Spirit to transform and educate Christians.

The parables of the stewards make it clear that, at the end of time, God will evaluate the performance of every individual. He will evaluate the performance of the two branches of his family: the adopted family and the disinherited family. It is clear from the parables of the stewards that the nonperforming family will not inherit anything. Everything that they pos-

sess, which they received from God, is transferred to the most efficient stewards. Clearly, this refers to the final judgment. The parable of the talents is in the section of Jesus' parables on the final judgment.

When we combine the two images, meaning the stewardship of the church and Christ's payment of the bride price to the father, we understand the nature of ownership in history. At the beginning of history, God granted capital to mankind. This was the dominion covenant. Men must develop all aspects of this capital, especially wisdom. Then, at the end of time, God evaluates performance. The church is the great beneficiary of its own performance and history, under the guidance of Christ and the Holy Spirit. This reward is indirect. Christ subdues his enemies. He transfers all authority back to the father. Then the father transfers this authority of administration back to covenant keepers. That is the inheritance. That is the transfer of the dowry. It is Christ's work in history that builds the value of this dowry. He does not keep it. God the Father does not keep it. It becomes the inheritance of covenant-keepers. It is their capital they will use to launch the next phase of dominion in the world beyond the final judgment. All of this is eschatological. It is surely economic.

The book of Proverbs makes it clear that wisdom is the greatest economic asset. "The one who finds wisdom is blessed; he also gets understanding. What you gain from wisdom is better than what silver will give in return and its profit is better than gold. Wisdom is more precious than jewels and nothing you desire can compare to her" (Proverbs 3:13–15). [North, *Proverbs*, ch. 9] This tells us that covenant-keepers will gain dominion in history through wisdom and by obedience to the laws of God. To imagine that they will remain the world's economic losers until the end of time, while covenant-breakers extend the kingdom of mammon by means of its laws, only to see the vast productivity of their program of dominion transferred to covenant-keepers at the end of time, is to imagine that the wisdom of the mammon is the source of wealth. This is contrary to the explicit teaching of Moses. "He fed you in the wilderness with manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:16–18). [North, *Deuteronomy*, ch. 22]

In the parables of the talents and the minas, we learn that covenant-keepers are the productive stewards, and the covenant breaker is the unproductive steward. When the owner returns for a final accounting, he is pleased with the covenant keeping stewards. He cast out the covenant-breaking steward. The performance of the covenant-keepers in history is a prelude to their endowment by God after the final judgment. Similarly, the performance of the covenant-breaker in history reflects his final inheritance. There is continuity of performance and reward in both groups, not discontinuity. It is not that the covenant-breaker was the productive steward, whereupon the owner transferred his wealth to impoverished covenant-keepers. The opposite is the case. Our understanding of the parables of the stewards should shape our eschatology. Our eschatology should be consistent with the message of the two parables.

The greater the value of the sin-free world at the end of time, the larger the dowry inherited by the church. Part of this dowry will be the lost legacy of the disinherited family of man. Part of this dowry will be the developed legacy of the adopted family of man. Amillennialists believe that the bulk of this dowry will be supplied by the disinherited family of man. They do not believe in the development of Christendom. Postmillennialists believe that the bulk of this inheritance will come from the efforts of the adopted family of man. The kingdom of God will have extended across the face of the earth, and it will have developed in terms of biblical ethics. Premillennialists agree with the postmillennialists, but they think that Jesus must supervise the development of this inheritance in Person. They do not believe that covenant-keepers can produce much of value on their own.

Conclusion

Christian economics rests on a presupposition: *there is ethical cause-and-effect in economic development*. There is consistency between ethical conformity to the laws of God and economic productivity. There is also consistency between covenant-breaking and long-term impoverishment. We saw this most clearly in the development of the economies of the Soviet Union (1917–1991) and Communist China (1949–1979), both of which led to impoverishment.

Christians need to understand the system of the bride price and the dowry in the Old Testament. They also need to recognize that this system still prevails in the New Testament. It will culminate in Jesus' transfer of the

bride price to God the Father. God the Father will then transfer this dowry to the church at the end of time. This understanding enables us to understand the meaning of the two parables of the stewards: talents and minas. The bride price/dowry system and the parables of the stewards point to the church's inheritance at the end of history. This is why economic theory is inseparable from biblical eschatology. They reinforce each other. If our understanding is incorrect in either area, it will be incorrect overall.

The bride church's dowry paid at the end of time will be enormous. We see this in the story of Jesus at the wedding feast (John 2:1–12). The host had run out of wine, which would have been a great embarrassment. Jesus' mother told Him of the host's predicament. In terms of the Mosaic law, the father of the bride was hosting the wedding at his home or rented facility, but the bridegroom had put up the money. This is why the waiter in charge of the feast spoke to the bridegroom regarding the looming problem, not to the father (v. 9).

Jesus' solution was to order the servants to fill water pots with water. There were six large pots, each containing two to three metretes. A metrete was about 40 litres or nine gallons. So, each pot contained anywhere from 18 to 27 gallons. Let us say that, on average, each pot contained 25 gallons. Together, they contained 150 gallons. The servants did as ordered. The water then became wine. This was not cheap wine. This was fine wine, more expensive than the best wine that the bridegroom had provided early in the feast (v. 10).

The end of the feast was fast approaching. The guests would not have consumed 150 additional gallons of wine. So, what would have been done with the left-over wine? The bridegroom would have sold it for a great deal of money. But this was not his money. It was his bride's dowry. Conclusion: this is God's promise to the church for its wedding feast, the marriage supper of the lamb (Revelation 19:9).

CONCLUSION TO PART 4

> *If you listen carefully to the voice of the Lord your God so as to keep all his commandments that I am commanding you today, the Lord your God will set you above all the other nations of the earth. All these blessings will come on you and overtake you, if you listen to the voice of the Lord your God (Deuteronomy 28:1–2).*

This passage makes it clear that positive sanctions in history that are the result of covenant-keeping should be regarded as the blessings of God. They are visible confirmations of God's covenant with his people. God's people are obedient, as the covenant requires. God is generous, as the covenant promises.

If this system of economic cause-and-effect is no longer an aspect of God's covenant with His people, then there is no possibility of developing an explicitly Christian economic theory. This observation also applies to social theory in general. If there is no explicitly Bible-based system of cause-and-effect in history, then Christians must explain cause-and-effect in terms of theories other than the Bible's theory. They must import alien theories of causation into their thinking, and then find some way to legitimize this importation in the name of Christian ethics. Jesus warned against this practice. He said that men cannot serve both God and mammon (Matthew 6:24). [North, *Matthew*, ch. 14] When Christian scholars import these alien theories of social cause-and-effect, they deceive themselves into believing that they are developing a uniquely Christian outlook. They baptize one or another covenant-breaking theory by calling it Christian. They do not understand that the theory they are baptizing is covenant-breaking. Why not? Because they do not believe that there are social and economic laws that are part of God's covenant with His people.

To argue that the system of causation that Moses declared to the generation of the conquest is no longer in force is to strip Christianity of its unique capability of bringing comprehensive redemption to society. If there

is no cause-and-effect between obedience to God's laws and success in history, then Christianity is incapable of presenting a message that will deliver the social institutions of any era from the covenantal rebellion that is the result of original sin. It would mean that Christianity's message of redemption is not comprehensive. It is not capable of redeeming the nations from their comprehensive rebellion against God and His laws. This would mean that sin will continue to reign supreme until the final judgment, despite the effects of the gospel in redeeming individuals from their sins. Sin is seen as exclusively personal, having no relevance for the institutions in which Christians have responsibility. Christians see themselves as honest participants in social, economic, and political institutions that are in rebellion against God and His laws. They see their task in life as sustaining the humanists' world order.

If this outlook on God's Bible-revealed laws were true, this would mean that the Israelites had greater authority, greater responsibility, and a far greater potential for bringing redemption to the world's institutions than Christians possess. This would mean that the Old Covenant empowered covenant-keepers to bring the message of redemption to the world in a far more effective way than the New Covenant empowers covenant-keepers. Under the Old Covenant, according to Moses, obedience to God's laws in every area of life was a means of evangelism. "Look, I have taught you laws and decrees, as the Lord my God had commanded me, that you should do so in the midst of the land which you are going into in order to possess it. Therefore keep them and do them; for this is your wisdom and your understanding in the sight of the peoples who will hear about all these statutes and say, 'Surely this great nation is a wise and understanding people.' For what other great nation is there that has a god so near to them, as the Lord our God is whenever we call upon him? What other great nation is there that has laws and decrees so righteous as all this law that I am setting before you today?" (Deuteronomy 5:5–8). [North, *Deuteronomy,* ch. 19]

By abandoning the ethical cause-and-effect system that God gave to Israel, modern Christians have surrendered most of the world's institutions to covenant-breakers. They have done this in the name of ethical neutrality. Covenant-breakers have insisted that they are ethically neutral in demanding that all people honor civil laws that are independent of God and independent of the Bible. Christians have agreed with them. This is why Christians who possess legitimate authority and therefore personal responsibility

in any area of life regard themselves as honest implementers of an ethical system that rests on this presupposition: "The God of the Bible has no authority to tell covenant-breakers what to do." This is not what Moses taught. This is not what David taught. This is not what the prophets of Israel taught. Christians implicitly and sometimes explicitly insist that there was a fundamental discontinuity with Old Testament ethics that was implemented by Jesus and continued by the apostles. But this was not what Jesus taught. "Do not think that I have come to destroy the law or the prophets. I have come not to destroy them, but to fulfill them. For truly I say to you that until heaven and earth pass away, not one jot or one tittle shall in any way pass away from the law, until all things have been accomplished. Therefore whoever breaks the least one of these commandments and teaches others to do so will be called least in the kingdom of heaven. But whoever keeps them and teaches them will be called great in the kingdom of heaven" (Matthew 5:17–19). This is not what Paul taught. "But we know that the law is good if one uses it lawfully. We know this, that law is not made for a righteous man, but for a lawless and rebellious people, for ungodly people and sinners, and for those who are godless and profane. It is made for those who kill their fathers and mothers, for murderers, for sexually immoral people, for homosexuals, for those who kidnap people for slaves, for liars, for false witnesses, and for whatever else is against faithful instruction. This instruction is according to the glorious gospel of the blessed God with which I have been entrusted" (I Timothy 1:8–11).

Why did Jesus insist that there is an irreconcilable war between the kingdom of God and the kingdom of mammon? Why did He insist that a person who is not with him, is against Him (Matthew 12:30)? Why is a day of rest in every seven mandatory for all mankind? That was how God created the world. That was why Moses insisted that Israel must obey the sabbath (Exodus 20:8–11). [North, *Exodus*, ch. 24] God owns the world. He owns it because he created it. He mandates a 10% payment by all humans to Him. They do not pay it. Even Christians rarely pay it. They do not believe that the principle of the tithe is built into the creation. They believe that they are autonomous from God. This economy is manifested in their budgets. Then they are surprised when the state intervenes and collects far more than the tithe.

With respect to the calling, throughout history men have pursued their jobs, which put food on their table, as if their jobs were their callings. But,

as men have grown wealthier, new areas of service have become possible. Men can now afford more than just putting food on their table. They have spare time. They have money. They can therefore afford to pursue services to others that match their God-given talents, even though their service does not earn money. Men ignore their callings. They ignore their families. They pursue money at the expense of everything else in their lives. Then they do not understand why they feel empty. They do not understand why the money does not satisfy their longings for meaning and purpose in life. They have no theory of the calling. Even Christians are confused in this respect.

The bride price is God's means of establishing continuity between the productivity of society in history and the world beyond the final judgment. I have explained why the capital, especially wisdom, that men accumulate through history will be the inheritance of the church in eternity. This should give great confidence to Christians regarding the long-term positive effects of their work in history. It should make them more faithful workers. The church of Jesus Christ is the bride of Christ, and God the Father will give the whole world to the church because Jesus has given the whole world to the Father. This is a message of comprehensive optimism. It is a message of hope. Hope is basic to entrepreneurship. It is basic to the exercise of dominion in history. Christians should appropriate this hope for themselves.

These are economic issues. They should be incorporated into Christian economic theory. They are aspects of God's covenantal rulership over the affairs of mankind. It would be a serious mistake not to incorporate these issues into Christian economics.

Part 5
MISINTERPRETATIONS

INTRODUCTION TO PART 5

I have more understanding than all my teachers, for I meditate on your covenant decrees (Psalm 119:99).

In every field of thought, both theoretical and practical, members of a new generation will abandon certain traditions of the previous generation. They will rethink the received truths that were handed down by that generation. Sometimes—in fact most of the time—they will confirm most of these truths. But they always reject some of them. There is an old slogan: "Science advances, one funeral at a time."

In Part 5, I survey three issues that have been misinterpreted by theologians and laymen. The first is the prohibition on interest, also called usury. This has not been taken seriously for at least a century. But throughout the history of the church, beginning no later than the fourth century, there have been theologians who have denied the legitimacy of all forms of interest-bearing loans. The second is the jubilee year. This misunderstanding is much more recent. It began in the 1970s in Left-wing Christian circles. It was a justification for national governments, but especially the government of the United States, to use tax money to repudiate personal debts and other governments' debts. The idea was soon picked up by some Christian leaders who advocated the same kind of debt repudiation, not for foreign governments, but for individual citizens. The third is inter-generational slavery. The church misinterpreted this issue until the nineteenth century.

The first misinterpretation, having to do with interest-bearing loans, began in the early church no later than the Council of Nicaea in 325. While there are still a few obscure Roman Catholic layman and non-theologians who still think this prohibition is valid, it has not been taken seriously by the Roman Catholic Church since the late nineteenth century. The second misinterpretation has not been taken seriously by elected governments anywhere in the world, but certain church groups have accepted it, including the Pope. The third misinterpretation led to a civil war in the United States

of America, 1861–65. Then, within a matter of months of the defeat of the seceding Confederacy, Southern white Christians' opinions backing slavery by an appeal to the Bible ceased, with only one exception: the publication in 1867 of Calvinist theologian Robert Dabney's 1863 manuscript, *A Defence of Virginia [and Through Her, of the South]*.

I devote space to these three misinterpretations because some Christians who do not understand my approach to Christian economics, which is based on the exegesis of texts, may jump to unwarranted conclusions. They may adopt slogans from the Christian Right that favor debt repudiation. They may think that this is in some way validated by the Mosaic law's recommended practice, which was never enforced, the jubilee year. They may also conclude that the Mosaic law's system of slavery indicates that the Mosaic law was somehow immoral. Any Christian who takes this approach walks into a theological minefield. It rests on a presupposition: the God of the Old Testament was essentially an immoral God, and Jesus broke with this God. Theologically liberal Christians hold such a view. Some humanists hold this view. It is exegetically incorrect. In my chapter on slavery, I show why it is incorrect.

50

THE PROHIBITION OF INTEREST

If you lend money to any of my people among you who are poor, you must not be like a moneylender to him or charge him interest (Exodus 22:25).

If your fellow countryman becomes poor, so that he can no longer provide for himself, then you must help him as you would help a foreigner or anyone else living as an outsider among you. Do not charge him interest or try to profit from him in any way, but honor your God so that your brother may keep living with you. You must not give him a loan of money and charge interest, nor sell him your food to earn a profit (Leviticus 25:35–37).

You must not lend on interest to your fellow Israelite—interest of money, interest of food, or the interest of anything that is lent on interest. To a foreigner you may lend on interest; but to your fellow Israelite you must not lend on interest, so that the Lord your God may bless you in all that you put your hand to, in the land which you are going in to possess (Deuteronomy 23:19–20).

Therefore you should have given my money to the bankers, and at my coming I would have received back my own with interest (Matthew 25:27).

Analysis

These passages seem to be contradictory. The passages in Exodus and Leviticus are explicit: the prohibition against interest applies to fellow believers who are poor. The passage in Deuteronomy 23 prohibits interest taken from a fellow Israelite. It does not specify that the Israelite should be poor. It seems more comprehensive. [North, *Deuteronomy*, ch. 57] But then we come to the passage in Jesus' parable of the talents, and here there is no prohibition whatsoever. How are we to sort out these passages?

Leviticus 25:37 also prohibits the sale of food at a profit to a poor person who is a fellow believer. [North, *Leviticus*, ch. 57] But there is no prohibition anywhere in the Bible on selling food at a profit to a fellow covenant-keeper who is not poor. If there had been such a prohibition, then agriculture would not have been profitable. The Israelites would have had to specialize exclusively in manufacturing, exchanging the output of their efforts for food produced outside of the nation of Israel. There was no such society in the ancient world. The whole world was agricultural in the days of Moses. The whole world was agricultural until the twentieth century. This is why we can be certain that the prohibition on interest was limited in exactly the same way that the prohibition on selling food at a profit was limited. It had to do with poor fellow believers.

In Deuteronomy 15, we find that the prohibition on interest involves more than simply a prohibition. The law had to do with charity. [North, *Deuteronomy*, ch. 36] It was not just that Israelites were not allowed to take interest from fellow believers who had fallen into poverty. They were told by God that they had to lend to these people at no interest. "If there is a poor man among you, one of your brothers, within any of your gates in your land that the Lord your God is giving you, you must not harden your heart nor shut your hand from your poor brother; but you must surely open your hand to him and surely lend him sufficient for his need" (Deuteronomy 15:7–8). Jesus extended this law. "If you only lend to people from whom you expect to be repaid, what credit is that to you? Even sinners lend to sinners, to get back the same amount. But love your enemies and do good to them. Lend, expecting nothing in return, and your reward will be great, and you will be sons of the Most High, for he himself is kind toward unthankful and evil people. Be merciful, just as your Father is merciful" (Luke 6:34–36). [North, *Luke*, ch. 10] I have never read a Christian expositor who takes these words literally without qualification. If this were to be mandatory, then covenant breakers could strip Christians of all their wealth by constantly coming to them, begging for loans, and then refusing to repay anything, including the principal. So, what did Jesus have in mind? He was talking about the general attitude toward mercy. If somebody is really in desperate straits, and a Christian is in a position to help this person, even at the expense of missing out on an investment opportunity, he should do this. But he should do it on this basis: the person really is in need, he has nowhere else to go, and it is a life-and-death situation. If it does not mean this, then it means that Chris-

tians will perpetually be subsidizing the self-destructive lifestyles of covenant-breakers.

Jesus's words should be interpreted in terms of their context. He was speaking to a nation under the yoke of the Roman Empire. Here's what I wrote in my commentary on this passage. Jesus was speaking to politically oppressed people. "The Romans were in control. Israel had been politically oppressed by foreigners ever since the Assyrian and Babylonian captivities. Israelites had long lived in empires whose rulers did not have the Israelites' best interests at heart. Politics means power. There were Jewish rulers who were low-level enforcers of Roman power, but the typical Jew was outside of the power structure. He was on the receiving end of political power. So, he was in a position of weakness. What is the proper response in such a situation? Jesus here described a plan of action: give away more than you expect to get. He presented the same message in Matthew. "You have heard that it was said, 'An eye for an eye, and a tooth for a tooth.' But I say to you, do not resist one who is evil. Instead, whoever strikes you on your right cheek, turn to him the other also. If anyone wishes to go to court with you and takes away your coat, let that person also have your cloak. Whoever compels you to go one mile, go with him two. Give to anyone who asks you, and do not turn away from anyone who wishes to borrow from you" (Matthew 5:38–42). [North, *Matthew*, ch. 9] These are rules for a captive people. Following these rules keeps people out of confrontation situations that they will lose. Here are my comments on the Matthew passage and the Luke passage. "Jesus did not call His listeners to revolt. He called them to obedience. He did not teach revolution through power. He taught revolution through moral example. His concern was the kingdom of God. In its historical manifestation, this kingdom is one of justice and righteousness. The program to defeat tyranny is a return to personal justice and righteousness. The answer to bad civil laws begins with good personal rules. This is not the final answer, however. It is only the first step."

With respect to dealing with fellow believers, Christians should not lend money at interest to people in poverty. Under the Mosaic law, a person who received a charitable, zero interest loan who then defaulted on the loan was put into slavery until the next sabbatical year. This was not a no-risk loan. Deuteronomy 15 was clear about this. "If your brother, a Hebrew man, or a Hebrew woman, is sold to you and serves you for six years, then in the seventh year you must let him go free from you. When you let him go free

from you, you must not let him go empty-handed. You must liberally provide for him out of your flock, out of your threshing floor, and out of your winepress. As the Lord your God has blessed you, you must give to him. You must remember that you were a slave in the land of Egypt, and that the Lord your God redeemed you; therefore I am commanding you today to do this" (vv. 13–15). This was not the penalty for defaulting on a profit-seeking loan. This is not a business venture. It was governed by a different set of laws. The loan was not collateralized by land or other property. The loan was collateralized by a man's freedom.

A. The Church vs. Interest

The Economic History site states: ". . . Christian theologians from the fourth century on defined lending for gain as a sin. Aquinas and his fellow scholastics amplified authors like St. Jerome on the subject, and Gratian built it into the code of Canon Law. Aquinas must have been gratified to find that Aristotle shared his hostility toward usury. By the late Middle Ages there was a consensus that lending at interest for guaranteed return was illegal and damnable. However, they also agreed that if the lender shared in the risk of the venture, the loan was legal. Consequently, laws against usury seldom interfered with merchant capitalism."

The Council of Nicea (325) announced:

> Canon 17: Forasmuch as many enrolled among the Clergy, following covetousness and lust of gain, have forgotten the divine Scripture, which says, "He hath not given his money upon usury," and in lending money ask the hundredth of the sum, the holy and great Synod thinks it just that if after this decree any one be found to receive usury, whether he accomplish it by secret transaction or otherwise, as by demanding the whole and one half, or by using any other contrivance whatever for filthy lucre's sake, he shall be deposed from the clergy and his name stricken from the list.

The Council of Carthage (459) announced:

> Canon 5: Of Avarice: Aurelius, the bishop, said: The cupidity of avarice (which, let no one doubt, is the mother of all evil things), is to be henceforth prohibited, lest anyone should usurp another's

> limits, or for gain should pass beyond the limits fixed by the fathers, nor shall it be at all lawful for any of the clergy to receive usury of any kind. . . . And what is reprehensible in laymen is worthy of still more severe censure in the clergy. The whole synod said: No one has gone contrary to what is said in the Prophets and in the Gospels with impunity.

The Second Lateran Council (1139) announced:

> Canon 13. Furthermore, we condemn that practice accounted despicable and blameworthy by divine and human laws, denounced by Scripture in the old and new Testaments, namely, the ferocious greed of usurers; and we sever them from every comfort of the church, forbidding any archbishop or bishop, or an abbot of any order whatever or anyone in clerical orders, to dare to receive usurers, unless they do so with extreme caution; but let them be held infamous throughout their whole lives and, unless they repent, be deprived of a christian burial..

The Third Lateran Council (1179) announced:

> Canon 25. Nearly everywhere the crime of usury has become so firmly rooted that many, omitting other business, practise usury as if it were permitted, and in no way observe how it is forbidden in both the Old and New Testament. We therefore declare that notorious usurers should not be admitted to communion of the altar or receive christian burial if they die in this sin. Whoever receives them or gives them christian burial should be compelled to give back what he has received, and let him remain suspended from the performance of his office until he has made satisfaction according to the judgment of his own bishop.

Pope Benedict XIV in 1745 issued an encyclical, *Vix Pervenit: On Usury and Other Dishonest Profits*. He announced:

> The nature of the sin called usury has its proper place and origin in a loan contract. This financial contract between consenting

> parties demands, by its very nature, that one return to another only as much as he has received. The sin rests on the fact that sometimes the creditor desires more than he has given. Therefore he contends some gain is owed him beyond that which he loaned, but any gain which exceeds the amount he gave is illicit and usurious. . . .
>
> First of all, show your people with persuasive words that the sin and vice of usury is most emphatically condemned in the Sacred Scriptures; that it assumes various forms and appearances in order that the faithful, restored to liberty and grace by the blood of Christ, may again be driven headlong into ruin. Therefore, if they desire to invest their money, let them exercise diligent care lest they be snatched by cupidity, the source of all evil; to this end, let them be guided by those who excel in doctrine and the glory of virtue.

This hostility to interest on loans is in obvious defiance of Jesus' parable of the talents. The owner of the talent who entrusted it to the resentful, lazy servant deserved an interest payment on his money. That is what he told the servant, just before he transferred the money to the most successful servant, and then condemned the lazy servant forever. Immediately thereafter, Jesus gave the account of the final judgment. In the history of the church, no one took seriously Jesus' parable of the talent's favorable view of interest. Instead, commentators invoked the Mosaic law's prohibition on usury, a prohibition that applied only to charitable loans.

B. Legally Identifying a Poor Person

I have dealt with this at length in Chapter 49 of my commentary on Exodus. Here is what I wrote.

Why was this not a statute law? Because biblical civil law presents only negative injunctions. It prohibits publicly evil acts. Biblical civil law does not authorize the courts to seek ways to make men good. It does not authorize the state to force men to do good things. It does not authorize the creation of a messianic, salvationist state. The state cannot search the hearts of men. God does this, as the Creator and Judge, so the state must not claim such an ability. The state is only authorized by God to impose negative sanc-

tions against publicly evil acts. It is not authorized to seek to force men to do good acts. In short, the Bible is opposed to the modern welfare state.

There is no way for biblical statute law to define what poverty is apart from the opinions of those affected by the law, either as taxpayers, charitable lenders, or recipients of public welfare or private charity. "Poverty" is too subjective a category to be defined by statute law. The state needs to be able to assign legal definitions to crimes, in order that its arbitrary power not be expanded. Yet economic definitions of wealth and poverty that are not arbitrary are not available to the civil magistrates for the creation of positive legal injunctions. Thus, God's civil law does not compel a man to make a loan to a poor person.

Nevertheless, the civil law does prohibit taking interest from poor people. How can it do this without creating the conditions of judicial tyranny through arbitrariness? If the magistrates cannot define exactly what poverty is for the purpose of writing positive civil injunctions, how can they define what a charitable loan is? How can the state legitimately prohibit interest from a charity loan if the legislators and judges cannot define poverty with a sufficient degree of accuracy to identify cases where a charity loan is legally obligatory for the potential lender?

The lender decides who is deserving of his loan and who is not. This is his moral choice. God, not the state, will judge him. However, once the lender grants this unique, morally enjoined charity loan, he may not extract an interest payment. This is a negative injunction—not doing something which is forbidden by law—and therefore it is legitimately enforceable by civil law, as surely as the civil magistrates in ancient Israel were supposed to enforce the release of debt slaves in the seventh (sabbatical) year (Deuteronomy 15:12–15). The requirement to lend to the brother in need under the terms specified in biblical law, being a positive injunction, therefore comes under the self-government provisions of the conscience and the negative sanctions of God. This positive injunction is not under the jurisdiction of the civil courts. On the other hand, the prohibition against interest on these unique loans, being a negative injunction, does come under the enforcement of both civil courts and church courts.

The key to understanding the Bible's civil definition of poverty is the loan's contract. There must be a mutually agreed-upon contract, explicit or implicit, in order to establish a legally enforceable loan. If the borrower comes to the lender and calls upon him to honor Deuteronomy 15:7–8, then

the borrower admits that his is a special case, a charity loan, and it is governed by the civil law's terms of the sabbatical and year and the prohibition against interest. The borrower makes his request a matter of conscience.

In so doing, he necessarily and inescapably places himself under the terms of biblical civil law. If he cannot repay his debt on time, he can be legally sold into bondservice. This is not a collateralized commercial loan. The borrower is so poor that he has no collateral except his land. He chooses not to use his land as collateral. He therefore chooses not to become a landless man, meaning landless until the next jubilee year. Yet he is still in dire need. All he can offer as collateral is his promise, his cloak, and his bodily service until the next sabbatical year should he default. Thus, the borrower admits that he in principle has already become a bondservant. He admits through the loan's contractual arrangement that the borrower is servant to the lender. If he cannot repay, he will go into bondservice until the next sabbatical year, or until his debt is repaid, whichever comes first.

How would the civil magistrate in Israel know which kind of loan was in force, commercial or charitable, and therefore whether interest was valid or illegal? By examining the nature of the loan's collateral. If a loan went to an individual who, if he should default on the loan, would be placed in debt slavery, then this was a charitable loan governed by the provisions of Deuteronomy 15. This is why the year of release applied to both kinds of servitude: debt servitude and bodily servitude that arose because of a man's default on a charity loan.

The law of inventory charity was part of the laws governing the sabbatical year and the jubilee year. As I demonstrate in Chapter 51, the sabbatical year and the jubilee law were both annulled by Christ's ministry. He announced that He was the fulfillment of the jubilee year.

> He came into Nazareth, where he had been raised, and as was his custom, he entered the synagogue on the Sabbath day and he stood up to read aloud. The scroll of the prophet Isaiah was handed to him. He opened the scroll and found the place where it was written, "The Spirit of the Lord is upon me, because he anointed me to tell good news to the poor. He has sent me to proclaim freedom to the captives, and recovery of sight to the blind, to set free those who are oppressed, to proclaim the year of the Lord's favor." Then he rolled up the scroll, gave it back to the attendant,

> and sat down. The eyes of all in the synagogue were fixed on him. He began to speak to them, "Today this scripture has been fulfilled in your hearing" (Luke 4:16–21).

With the abolition of the jubilee year came the abolition of the sabbatical year principle. [North, *Luke*, ch. 6] Therefore, the whole system of morally mandatory zero-interest charitable loans, which were abolished in the seventh, sabbatical year, also came to an end. These laws had to do with the land of Israel as the God-given inheritance of the conquest generation. Rural land went back to the original families of the conquest. This law did not apply to walled cities (Leviticus 25:29–30). It applied only to rural land. With the abolition of the land of Israel as holy land, which came in A.D. 70, the jubilee laws ceased.

C. The Prohibition of All Interest

Beginning in the early church, there were theologians who opposed all taking of interest. They did not distinguish between a charitable loan and a business loan. They did not discuss the abolition of the jubilee year and the sabbatical year system of resting the land. Again, I cite Chapter 49 my commentary on Exodus.

Aristotle taught that money is sterile—that it cannot increase by moving from person to person over time—and therefore undeserving of any return beyond the principal. Economist Joseph Schumpeter wrote this of Aristotle: "He condemned interest—which he equated to'usury' in all cases—on the ground that there was no justification for money, a mere medium of exchange, to increase in going from hand to hand (which of course it does not do). But he never asked the question why interest was being paid all the same. This question was first asked by the scholastic doctors. It is to them that the credit belongs of having been the first both to collect facts about interest and to develop the outlines of a theory of it. Aristotle himself had no theory of interest." Neither did the early church.

Early medieval theologians were unaware of Aristotle's specific arguments; copies of his manuscripts were not available until the eleventh century. Later, Aquinas did follow Aristotle in condemning interest. On the other hand, some of the late-medieval scholastic theologians broke with Aristotle on this point. With or without Aristotle, however, the Roman Church remained officially hostile to usury throughout the medieval peri-

od. We still find a few isolated Roman Catholic theologians who try to defend the view of those medieval scholastic theologians who opposed all interest as usury. Sadly, we occasionally find Protestant non-theologians and non-economists who say the same thing.

D. Inescapable Interest

The phenomenon of interest is inescapable in any economy. It is not something "extracted" from borrowers by lenders. It is inherent in the very way we all think about the future, whether as borrowers or lenders. We are creatures. We are always time-constrained. We live in the present. Those items which we presently possess are of greater use to us—and therefore of greater economic value to us—right now than the prospect of using those same physical items in the future. We are covenantally responsible now for the use of whatever we presently own or control. We therefore discount future value as against present value. It is this present market discount of future value, above all, which is the reason why there is an interest phenomenon in economics.

Any attempt to legislate away the inescapable effects of the rate of interest (discount for time-preference) should be seen as a doomed attempt to escape both time and creaturehood. To put it as bluntly as possible, anyone who argues that an economy can operate apart from the effects of the time-preference factor has adopted the economic equivalent of the perpetual motion machine. Both arguments—perpetual motion physics and zero interest economics—rely on men's obtaining "something for nothing." In fact, anyone who would recommend civil legislation against all interest payments is far more dangerous than a person who would argue for legislation prohibiting all machines except perpetual motion machines. The second person is instantly recognized as a crackpot whose proposed legislation would destroy civilization, assuming that the civil government would seriously attempt to enforce it. The anti-usurer isn't as readily recognized as a dangerous crackpot, even though his recommendation, if seriously enforced by civil law, would be equally a threat to the survival of civilization. Both forms of legislation, if enforced, would de-capitalize society. The crackpot amateur physicist, however, cannot do what the crackpot amateur economist can do and has done in the past: present himself as a defender of "love" in social theory, a protector of society's "bank-oppressed" little people, and a person who has found a long-neglected way to eliminate from this world a

group of corrupt money middlemen and their extortionate ways, thereby making everyone else a little bit richer. Even worse, the anti-interest destroyer of nations who would ruin society by making illegal all interest payments can easily present his case in the name of the Bible. The nut (or outright occultist) who would prohibit by civil law all non-perpetual motion machines cannot easily appeal to anyone in the history of moral thought. Nevertheless, both types of self-professed reformers—the perpetual motion "physicist" and the zero-interest "economist"—are ultimately appealing to the occult or to magic, but the anti-usurer's appeal is not recognized as such, not even by Christians. Usury laws are the destroyer of nations.

It would be nice if I did not have to mention any of the following crackpot theories of economics. The reason why this task is unavoidable is that these ideas have spread far and wide in Christian circles. Christian economics has been an ignored topic for centuries. What has passed for Christian economics in the past has either been baptized moralism or baptized humanism. Numerous crackpot schemes have been promoted in the name of Christian economics, and still are being promoted. The closer we get to the question of monetary policy and interest, the more likely we are to discover attacking interest claiming to be Christian.

Anyone who seriously discusses the possibility of judicially compulsory zero-interest loans in a "free" or "wise" economy is a monetary crank, a person with no formal training in economics or social theory, and a person dangerously devoid of understanding regarding the human condition. You know for sure that you are listening to an economic amateur when you hear someone seriously propose the possibility of an economy without any legal debt, meaning an economy without legally enforceable contracts to deliver goods or services in the present in exchange for a greater quantity of goods or services in the future. This would be an economy run exclusively in terms of zero-interest business loans.

E. Loans to Churches

The prohibition on usury clearly and absolutely prohibits interest payments on all charitable loans to other Christians. This includes loans to churches and other non-profit institutions that come to Christians in the name of Christ. The church is not a business. A Christian who loans the church anything, at any time, for which he requires an extra amount in repayment, is violating the Bible's law against interest. Any leader in a church

or charitable Christian organization who encourages Christians to make interest-bearing loans to it is involving its supporters in the sin of usury. This restriction on "church bonds" is almost universally ignored by denominational leaders today. The Bible is clear on this point: usury is a terrible crime (Jeremiah 15:10). The prophet Ezekiel announced that it is actually a capital crime in the eyes of God, and will not go unpunished (Ezekiel 18:8–9). [North, *Prophets*, ch. 19] Yet churches and Christian schools in almost every denomination can be found offering "Christian stewardship" (usury) contracts to their supporters. They come in the name of charitable, kingdom-building projects, and yet they promise to pay interest.

A church may lawfully request a loan from a bank or other thrift institution. This is unwise, given the fact that the borrower is servant to the lender (Proverbs 22:7). [North, *Proverbs*, ch. 67] Nevertheless, the bank is not wrong in taking an interest return from a church. The bank is not a Christian. It is not a member of a church. It does not face damnation or salvation. The church does not approach it in the name of Jesus, or with the promise of future rewards in heaven. The bank is strictly a commercial lending institution. The bank is the agent of depositors of all religious faiths.

Conclusion

Interest is inescapable. It is not a uniquely monetary phenomenon. It is the discount we apply to future goods as against present goods. This process goes on continually, whether or not there is a money market, whether or not published loan rates are available. When we loan anything, we forego the use of it for a time. This is opportunity foregone. It is God's asset. It is His opportunity cost. He expects us to make good use of His goods over time. This is why we discount the value of future goods. Present goods are more valuable, more value-laden. This was not understood by theologians. They did not ask themselves why the owner in the parable of the talents expected a positive rate of return from bankers. By God's grace and businessmen's creativity, Catholic theologians found ways around this ancient prohibition.

The confusion throughout the Middle Ages and early modern period concerning the evil or illegitimacy of interest came as a result of not paying attention to the biblical texts, and then mixing in the fallacious economic opinions of Aristotle.

The Bible is clear: there is to be no interest return from money loaned to a poverty-stricken neighbor. This applies to money loans and loans of goods.

But the definition of poverty must be the willingness of the borrower to serve as a slave to the lender for up to six years, should he be unable to repay the loan on time. Ordinarily, though, charity loans would be small, and the time to repay would probably not be seven years, unless it was for something like the payment of physicians' bills or lawyers' fees.

There is no prohibition on interest returns from business loans or loans to covenant-breakers. The Hebrew word translated as "usury" in the King James Bible (1611) is narrow and precise in its application: interest derived from morally mandatory charity loans, either from poverty-stricken righteous brothers in the faith or from resident aliens who live alongside believers. The word does not mean "exorbitant" interest. That usage was the product of the early modern period, and is not the product of biblical analysis.

51

THE JUBILEE YEAR

For six years you will sow seed on your land and gather in its produce. But in the seventh year you will leave it unplowed and fallow, so that the poor among your people may eat. What they leave, the wild animals will eat. You will do the same with your vineyards and olive orchards (Exodus 23:10–11).

You must count off seven Sabbaths of years, that is, seven times seven years, so that there will be seven Sabbaths of years, totaling forty-nine years. Then you must blow a loud trumpet everywhere on the tenth day of the seventh month. On the Day of Atonement you must blow a trumpet throughout all your land. You must set apart the fiftieth year to the Lord and proclaim liberty throughout the land to all its inhabitants. It will be a Jubilee for you, in which property and slaves must be returned to their families. The fiftieth year will be a Jubilee for you. You must not plant or conduct an organized harvest. Eat whatever grows by itself, and gather the grapes that grow on the unpruned vines. For it is a Jubilee, which will be holy for you. You must eat the produce that grows by itself out of the fields. You must return everyone to his own property in this year of Jubilee (Leviticus 25:8–13).

Analysis

The law of Exodus 23 was repeated in the opening section of Leviticus 25. The sabbatical year of rest for the land was integral to the jubilee year (Leviticus 25:1–7). [North, *Leviticus*, ch. 23] The pattern of the sabbatical year was the same as the pattern of God's creation week. There were six days of labor, and the seventh day was a day of rest. This was supposed to be the pattern of land ownership in the nation of Israel. This law began as soon as the Israelites conquered the land. It was originally a law of the jubilee, although it was tied to it; it was a law of the sabbath. This leads us to an im-

portant implication: *the law of the jubilee was an extension of the sabbatical principle of rest*. The sabbatical year law was primary; the jubilee land laws were secondary. The sabbatical year law was more fundamental than the jubilee land laws.

The sabbatical year was supposed to begin at the time of the conquest, although the law preceded the announcement of the jubilee. The annual count-down for jubilee year was also to have begun. Why was there no trace of this pair of integrated laws prior to the conquest? They had nothing to do with the covenant of God with Abraham. Only after the exodus from Egypt did God announce this law. Furthermore, there was an expiration date on this law. Ezekiel announced this. "So you will distribute the inheritances for yourselves and for the foreigners in your midst, those who have given birth to children in your midst and who are, with you, like the native born people of Israel. You will cast lots for inheritances among the tribes of Israel. Then it will happen that the foreigner will be with the tribe among whom he is living. You must give him an inheritance—this is the Lord's declaration" (Ezekiel 47:22–23). [North, *Prophets*, ch. 22] Ezekiel announced this at the beginning of Judah's exile in Babylon. When Israel returned to the land under the Medo-Persians, the nation never again had rulers from the tribes of Israel. The nation was always under the domination of one of the three pagan empires: Medo-Persia, Greece, and Rome.

The sabbatical year was not honored by the nation. Jeremiah announced this as the reason for the coming exile for Judah. It also applied retroactively to the already exiled northern kingdom, which was in Assyria at the time of Jeremiah's ministry. Of the Chaldeans/Babylonians we read: "They burned down the house of God, broke down the wall of Jerusalem, burned all its palaces, and destroyed all the beautiful things in it. The king carried away to Babylon those who had escaped the sword. They became servants for him and his sons until the rule of the kingdom of Persia. This happened to fulfill the word of the Lord by the mouth of Jeremiah, until the land should have enjoyed its Sabbath rests. It observed its Sabbath for as long as it lay abandoned, in order to pass seventy years in this way" (II Chronicles 36:19–21). Because the sabbatical years were not honored, it is clear that the jubilee year was also not honored.

The sabbatical year was a time of debt forgiveness, but only for those Israelites who had fallen into poverty and who had received zero-interest charitable loans. The rules governing the sabbatical year's release of debt ap-

pear in Deuteronomy 15. "At the end of every seven years, you must cancel debts. This is the manner of the release: Every creditor will cancel that which he has lent to his neighbor; he will not demand it from his neighbor or his brother because Lord's cancellation of debts has been proclaimed. From a foreigner you may demand it; but whatever of yours is with your brother your hand must release. However, there should be no poor among you (for the Lord will surely bless you in the land that he gives you as an inheritance to possess), if only you diligently listen to the voice of the Lord your God, to keep all these commandments that I am commanding you today. For the Lord your God will bless you, as he promised you; you will lend to many nations, but you will not borrow; you will rule over many nations, but they will not rule over you" (vv. 1–6). [North, *Deuteronomy*, ch. 36] It is safe to say that this aspect of the sabbatical year was also not honored.

The jubilee year was a time of debt forgiveness. But it applied differently. It applied to the rural land of Israel. We read that "property and slaves must be returned to their families" (Leviticus 25:10b). [North, *Leviticus*, ch. 24] This took place after Israel's conquest of the land. The land was distributed by the casting of lots (Joshua 17). In the jubilee year, the heirs of the original families were to receive their share of the family plots. This law did not apply to walled cities. "If a man sells a house in a walled city, then he may buy it back within a whole year after it was sold. For a full year he will have the right of redemption. If the house is not redeemed within a full year, then the house in the walled city will become the permanent property of the buyer and his descendants. It is not to be returned in the year of Jubilee" (Leviticus 25:29–30).

Commentators do not deal with this fundamental historical issue: *the jubilee had its origin in genocide*. The Israelites conquered the land of Canaan through war. That was Abraham's promised inheritance. This conquest began on the east side of the Jordan River when Israel conquered lands that had belonged to tribes that had attacked Israel (Deuteronomy 3). Those families that had been involved in the conquest gained original ownership of the conquered lands 40 years after the exodus. *This is why the jubilee year has nothing to do with the New Testament era*.

Consider a grant of capital in the form of developed land. God gave His people the Promised Land as their inheritance. Also included were existing houses and fields (Joshua 24:13). They inherited the capitalized value of the houses and planted fields of the Canaanites. The Canaanites had un-

knowingly served as stewards of the land, building up its value until the fourth generation after Israel's descent into Egypt (Genesis 15:16). [North, *Genesis*, ch. 23]

Having delivered a capital asset into their hands, God specified that they must, as a nation, rest the land every seventh year. This was to be a national year of rest. The law applied only to agricultural land. It did not restrict commerce, manufacturing, equipment repair, or anything except planting and harvesting by owners. Urban occupations were not under the terms of this law. This law granted a year of rest from field work to all those under the household authority of landowners, including hired servants.

A. Resting the Land

The year of rest was an acknowledgment of the limits on man's knowledge. Man cannot know everything about the land. The land's owner therefore was not allowed to treat the land indefinitely as if it were a mine. The "mining" of the soil could go on for six years in seven, but not in the seventh year. He was not allowed to strip the soil of its productivity. The seventh year was a rest period for the land in the broadest sense, including worms, bugs, birds, weeds, and every other living creature that dwelled on or in the land. This would preserve the land's long-run value. This limitation on the landowner's extraction of present income from the land was a means of preserving the capitalized value of the land over time. This placed a limit on both man's greed and ignorance. It forced the landowner to honor the future-orientation of God's covenant. It preserved the landed inheritance for future generations. God's sharecroppers in one generation were not allowed to undermine the future value of the land by overproduction in the present. God, as the land's ultimate owner, was thereby able to maintain a greater percentage of the land's original capitalized value.

The sabbatical year was a system for forcing men to become self-consciously dependent on God's grace. Dependent on Him, they were to become dominion-minded. Subordinate to God, they were to become active toward the creation. This is the mandated hierarchical pattern for the dominion covenant: *those who are meek before God will inherit the earth*. The year of debt release was also to be the year of open access to the fields for non-owners: the community's poor. It was a year of hard work for harvesters.

B. The Sabbatical Year in the New Covenant

The church has never argued that the sabbath rest of the land every seventh year is binding in New Testament times. Theologians recognize that there is a fundamental discontinuity between the Mosaic sabbath and the New Testament's Lord's day. The fact that the day is not celebrated on the same day, meaning Saturday, is indicative of a fundamental discontinuity. Theologians debate over just how discontinuous the Lord's day is. With respect to the resting of the land, there has never been support for the idea of the Lord's year.

1. The Weekly Sabbath

First, the Mosaic model for the sabbatical year was the weekly sabbath: a day of rest at the end of the week. In the New Covenant, the locus of authority of sabbath enforcement has shifted from the state and church to the individual (Romans 14:5–6). [North, *Romans*, ch. 14:B] This is the judicial basis for the annulment of the death penalty for violating the weekly sabbath (Exodus 31:14–15).

Second, the law in Israel established a national sabbatical year governing both agriculture and charitable debt. This was possible to impose because the Israelites had entered the land as conquerors at a specific point in time. That historical starting point no longer exists.

The absence of a fixed sabbatical year could be changed today through civil legislation, but is there biblical justification for this? Only in the name of ecology. The individual is to enforce the weekly sabbath, not the state. The same is true of any seventh-year sabbath. Is the individual still duty-bound by God to honor the sabbatical year? Does God threaten negative sanctions, corporate or individual, against those who refuse to honor its provisions? Or was the sabbatical year limited to the Mosaic Covenant?

Were the sabbatical year laws exclusively part of the jubilee system? No. The law was given first in Exodus 23:10–11. It was given primarily for the benefit of the poor in the land and secondarily for the beasts of the field (v. 11). The context was the sabbath in general (v.12), not the jubilee system. [North, *Exodus*, ch. 53] The identification of the beasts of the field as recipients of the benefit of rest leads to the broader question of just which beasts God has in mind. Did He mean domestic animals only? Or is the wild beast included? What about the worm and the insect?

2. Ecology

Man has creaturely limits on his knowledge. He is not omniscient, nor will he ever be. He can harm land through mono-crop agriculture and other techniques that can prove to be exploitative over time. Overuse of pesticides in modern times may prove to be a cause of major ecological damage. Scientists do not presently agree on this. Eventually, a majority of them may agree, although it may take a crisis to produce such agreement, or else generations of additional agricultural productivity. The question is: "Is a compulsory year of rest for the sake of the land established by God's law?" This raises other questions. "Should the state compel the owner of every farm, every garden, and every vineyard to cease cultivating his land one year in seven—not necessarily all enterprises in the same year, but each enterprise one year in seven?" Alternatively, "should land-use enforcers be sent out to police every farm, determining that one-seventh of each plot under cultivation be left fallow each year?" The regulatory nightmare that would result from either interpretation suggests an answer: no. But is the potential cost of regulation a sufficient reason for abandoning this law? No. There has to be a judicial reason for ignoring any of God's Old Covenant laws, not mere pragmatism or presumed convenience. The familiar refrain is not sufficient: "God's Old Testament laws applied only to an ancient agricultural economy." That is an invalid objection covenantally; it is also weak in this instance. This happens to be an agricultural law. If the law's primary goal was ecological—rest for the creatures of the field and soil—then the New Covenant can be said to have changed this law's validity only if it established a new relationship among God, man, and the land. Did it? Yes. The land ceased to be a judicial agent of God. [North, *Leviticus*, ch. 33]

3. Sanctions and Sanctification

First, we have already considered one major change in relation to the land's function as a judicial agent for God. The Promised Land vomited out the Canaanites (Leviticus 18:28). This judicial act is now performed by Jesus Christ (Revelation 3:16). The land no longer serves as the judicial agent of God. Second, the curse of the land was definitively overcome by the New Covenant. Men are no longer polluted by the land. This is why foot-washing is no longer ritually mandatory in the post-resurrection, post-temple era. Progressive sanctification, individually and corporately, steadily removes the restraints of the land's scarcity. This has been happening rapidly for at

least two centuries. The price of agricultural commodities compared to the price of labor has steadily dropped as the jurisdiction of the free market economy has advanced.

The exploitation of the land, net, may still be going on. We may be facing an agricultural calamity as a result of our techniques of agricultural production and land management. Or we may not. The ecological evidence is unclear; well-informed people can be found on both sides in this debate. This evidence, however, is clear: no agricultural calamity is foreseen by those whom we reward to forecast such possibilities. The industrial revolution has also been an agricultural revolution.

The covenantally significant question is: "Can we legitimately attribute a supposedly looming agricultural calamity to our failure to rest the land?" Then there is an economic question: "Had the national government required a year of national rest for the land, would this have offset all the other commercial farming practices that supposedly erode the land's long-term productivity?" There is no way to know. We are comparing a conjectural future (famine) with a conjectural past (the rate of land erosion under the sabbatical year). So, in order to understand the sabbatical land law in the Mosaic economy, we have to decide in terms of biblical judicial issues, not ecology.

This is not to say that resting the land will not prove to be a means of increasing long-term agricultural output, and therefore income, but the test must be profit and loss under free market conditions. The general law of the New Covenant Lord's day must prevail: the decision of each individual landowner operating under the sovereign jurisdiction of his conscience. We dare not move from the annulled jubilee year laws to the sabbatical land law in New Covenant times, nor dare we move from the New Covenant Lord's day to a national year of rest. This leaves the landowner in charge. Paul wrote: "One person values one day above another. Another values every day equally. Let each person be convinced in his own mind. He who observes the day, observes it for the Lord; and he who eats, eats for the Lord, for he gives thanks to God. He who does not eat, refrains from eating for the Lord, he also gives thanks to God" (Romans 14:5–6). The same covenantal principle of individual jurisdiction also applies to the sabbatical year of rest.

C. Jesus and the Jubilee

The jubilee laws are important for Christians because of Jesus' first public announcement concerning the nature of His ministry.

> The scroll of the prophet Isaiah was handed to him. He opened the scroll and found the place where it was written, "The Spirit of the Lord is upon me, because he anointed me to tell good news to the poor. He has sent me to proclaim freedom to the captives, and recovery of sight to the blind, to set free those who are oppressed, to proclaim the year of the Lord's favor." Then he rolled up the scroll, gave it back to the attendant, and sat down. The eyes of all in the synagogue were fixed on him. He began to speak to them, "Today this scripture has been fulfilled in your hearing" (Luke 4:17–21)

Jesus' application of Isaiah's language of liberation indicates that He saw His ministry as the fulfillment of the jubilee year. [North, *Luke*, ch. 6] This is consistent with the New Testament's judicial theology of rest. Jesus' work in history is the judicial foundation of man's sabbatical rest; His kingdom is the definitive basis in history for man's future rest (Hebrews 4:1–11).

The jubilee year of release was an aspect of the conquest of the land by Israel. This has nothing to do with the New Testament church. It has nothing to do with the kingdom of God. There was a time when it did, but that time ended with the judgment of God against Israel and then Judah: the exiles in Assyria and Babylon. After the land rested, and the people returned to the land, there is no indication that there was ever a jubilee year. There was no way to enforce this. The land was partially occupied by people who had been brought in from the Assyrian Empire and the Babylonian Empire. They did not lose their land when the Israelites returned. They were not part of the conquest of the original Canaanites. After the fall of Jerusalem in A.D. 70, the land ceased to have any covenantal relevance.

D. Modern Calls for Debt Abolition

There is a great deal of confusion in modern Christian circles, both fundamentalist and liberationist, regarding the applicability of the jubilee laws in the New Covenant era. Furthermore, Christians can gain little from a study of the rabbinical sources dealing with the jubilee, since very few of these texts deal in detail with these post-temple applications of the jubilee laws. The question arises: "Is the sabbatical year law still in force?" This is another way of asking: "What in the New Testament may have annulled it?"

Beginning in the 1970s in the United States, Christians who identified themselves with the political Left began calling for a redistribution of

wealth in order to achieve greater economic equality. This was standard rhetoric of welfare state liberals. By the time that Christians got actively involved with Left-wing politics, the welfare state was four decades old in the United States. The same economic inequality that had prevailed in the 1920s still prevailed in the 1970s. Clearly, the welfare state had failed to redistribute wealth sufficiently to achieve anything remotely resembling economic equality.

In the next decade, Protestant Christians who identified themselves with the political Right also began calling for a jubilee year. They wanted a jubilee year of debt annulment. It was not clear exactly which debts were supposed to be repudiated. If all debt had been repudiated, this would have bankrupted the banks, bankrupted every civil government, destroyed the government-funded retirement programs, and produced a massive depression. But the groups were never forthright about the details of how this Jubilee debt reduction declaration would be implemented.

In January 1999, Pope John Paul II issued this statement: *Ecclesia in America.*

> The existence of a foreign debt which is suffocating quite a few countries of the American continent represents a complex problem. While not entering into its many aspects, the Church in her pastoral concern cannot ignore this difficult situation, since it touches the life of so many people. For this reason, different Episcopal Conferences in America, conscious of the gravity of the question, have organized study meetings on the subject and have published documents aimed at pointing out workable solutions. I too have frequently expressed my concern about this situation, which in some cases has become unbearable. In light of the imminent Great Jubilee of the Year 2000, and recalling the social significance that Jubilees had in the Old Testament, I wrote: "In the spirit of the Book of Leviticus (25:8-12), Christians will have to raise their voice on behalf of all the poor of the world, proposing the Jubilee as an appropriate time to give thought, among other things, to reducing substantially, if not cancelling outright, the international debt which seriously threatens the future of many nations."

There were multiple secular organizations in at least 60 nations in the year 2000 that called for debt relief. These calls were not for third-world nations unilaterally to repudiate their debts to Western governments and banks. Rather, they were calls for Western governments to allow the repudiation of debts, and also to provide free money to foreign governments so that they could repay large Western banks, the World Bank, and the International Monetary Fund (IMF). These projects' pleas fell of deaf political ears. None of these groups seriously invoked Leviticus 25 as judicially binding in the modern world. But the biblical rhetoric sounded good.

Conclusion

The judicial foundations of the sabbatical year of rest were two-fold: (1) the sabbath rest principle; (2) God's original ownership of the land. At the time of the conquest, God transferred control over the land to families that held legal title on a sharecropping basis, operating under specific terms of the original leasehold agreement. The lease provided a payment to God (the tithe), i.e., a high percentage return to God's authorized sharecropper-owners (90% before taxes), and a provision for the maintenance of the long-term capital value of the land (the sabbatical year). Those residents in Israel who did not own the land had legal title to the output of the land: unrestricted harvest in sabbatical years. The legal title of the gleaners was to be enforced by the Levites and priests on landowners.

The judicial issue of the sabbatical year was rest: rest for the land, hired workers, and animals. This also included release from the requirement to repay charitable debts (Deuteronomy 15). By "rest," the law meant *a respite for the landless from the requirement to work for the landed*. This law governed agricultural land and those who worked it. There is nothing in the Bible to indicate that it governed any nonagricultural occupation.

This law pressured landowners to plan and save for the sabbatical year. They had to store up both food corn and seed corn. When this law was enforced, it forced them to develop the habit of thrift, i.e., future-orientation. The law also required landowners to forfeit the automatic (though not "natural") productivity of the land in the seventh year. The poor, the stranger, the field animals, and the regular harvesters all had a legal claim on this production, if they were willing to do the work to glean it.

The Levites were the enforcers of this law as it applied to the gleaners' lawful access to the fruits of the land. The Levites refused. This indicates

they had little or no short-term economic incentive to enforce it. This in turn indicates that their tithe income was greater when the land was planted and harvested. Finally, this indicates that there was less net agricultural output in the seventh year than in the other six.

This law was good for the land and all the creatures great and small that inhabited it. Owners were restrained in their use of God's land. Agricultural practices that overworked the land were restrained by this law. The land, as God's judicial agent, deserved its rest. This law mandated it. If this land-protecting aspect of the law was enforced by the state, as I believe it was, it rested on the legal status of the land as God's judicial agent, not on the state as an agency of wealth redistribution to the gleaners. This law is no longer in force in the New Testament era because the land ceased to be a covenantal agent in A.D. 70.

The sabbatical year law was enforced after the Babylonian exile (I Maccabees 16:14–16). The fear of God is a great incentive. During the exile, God had substituted His negative sanctions in history for the failure of the priesthood and the state to enforce the sabbatical year law. Exile was God's partial disinheritance of Israel. It warned Israel of comprehensive disinheritance, should the nation continue to rebel. The exile altered land tenure: a new distribution replaced the original distribution under Joshua. The exile severed the judicial link between each family's plot and the conquest generation. The jubilee land laws had been established by genocide, but genocide was neither authorized by God nor possible after the exile. The jubilee's heathen-slave laws remained in force, but the residents who participated in any post-exilic distribution were to become immune to the threat of permanent servitude by Israelites.

The primary covenantal issue of the jubilee laws was holiness. The jubilee inheritance law had little or nothing to do with assuring economic equality, except in times of national covenantal cursing: stagnant population. The law had everything to do with the mandating of political and cultural inequality: giving a permanent head start to heirs of the conquest over immigrants, even those immigrants who became members of the covenant through circumcision, but not members of land-inheriting families. Only through adoption, either directly or through marriage (for females), could immigrants gain this advantage.

The sabbatical land law was an extension of the law of the sabbath. It was not a subset of the jubilee land laws. On the contrary, the jubilee land

laws were temporary applications of the sabbath law's principle of rest. If there are any New Testament applications of the sabbatical year of rest for the land, they are based on ecology or the general authority of sabbath rules, not on the jubilee's military conquest. This transfers the locus of authority to the landowner: individual, not corporate.

52

SLAVERY

As for your male and female slaves, whom you can obtain from the nations who live around you, you may buy slaves from them. You may also buy slaves from the foreigners who are living among you, that is, from their families who are with you, children who have been born in your land. They may become your property. You may provide such slaves as an inheritance for your children after you, to hold as property, and make them slaves for life, but you must not rule over your brothers among the people of Israel with harshness (Leviticus 25:44–46).

"The Spirit of the Lord is upon me, because he anointed me to tell good news to the poor. He has sent me to proclaim freedom to the captives, and recovery of sight to the blind, to set free those who are oppressed, to proclaim the year of the Lord's favor." Then he rolled up the scroll, gave it back to the attendant, and sat down. The eyes of all in the synagogue were fixed on him. He began to speak to them, "Today this scripture has been fulfilled in your hearing" (Luke 4:18–21).

Analysis

Jesus invoked the language of deliverance. It is from Isaiah 61:1–2. [North, *Deuteronomy*, ch. 14] The prophet's language promised longed-for deliverance. The jubilee year was the year of deliverance for the poor of Israel under the Mosaic law (Leviticus 25). [North, *Leviticus*, chaps. 23–31] It was the archetype of liberation, the restoration of the family's land to those who had been dispossessed or sold into servitude.

The Hebrew Masoretic text does not mention sight to the blind. The Greek translation of the Old Testament (the Septuagint) does. William Hendriksen mentioned an alternate reading of the Hebrew text, "to those bound opening of eyes." But the Septuagint's rendering is "to the blind recovery of sight," just as Jesus quoted it. Jesus gave sight to the blind on sev-

eral occasions. These miracles were literal fulfillments of the prophecy in Isaiah, as recorded in the Septuagint.

The phrase, "to set free the oppressed," does not appear in the Hebrew Masoretic text, the Greek Septuagint, or the Aramaic Peshita. There is no obvious explanation for this discrepancy. Was this phrase Jesus' comment on the text, offered without warning in the middle of the reading? If He had added to the text, some of His listeners would have recognized this discrepancy. This would have undermined His authority. But there was no objection. Did this scroll differ from the copies that we have today? This seems unlikely, given the Jews' care in making exact copies and destroying imperfect ones. Did Luke add these words? Did some early scribe? I wish I had a definitive answer. I don't.

The jubilee law authorized the inter-generational enslavement of foreigners (Leviticus 25:44–46). [North, *Leviticus*, ch. 30] Christ's announcement here of liberty for the captives suggests that the end of the Mosaic law of permanent enslavement was at hand, along with the rest of the jubilee laws. It is on this basis, and I believe *only* on this basis, that abolitionism can be defended biblically by someone whose hermeneutic assumes that a Mosaic law remains in force unless it was annulled by the New Testament. In contrast, for those whose hermeneutic assumes that a Mosaic law must be reasserted in the New Testament in order for it to be valid, abolitionism remains a problem because of Paul's Epistle to Philemon.

The fulfillment of the jubilee year by Jesus at the outset of His ministry made plain the liberating aspects of the rule of Christ in history. He announced His ministry with the reading of Isaiah 61, to preach deliverance of the captives. His intention was clearly the spiritual liberation of His people, and this leads to progressive maturity in the faith, which in turn is supposed to lead to liberation out of chattel slavery, if offered by the owner (I Corinthians 7:21b). [North, *First Corinthians*, ch. 8] We have our "ears pierced" (Deuteronomy 15:17) spiritually by Christ; we become permanent adopted sons of His household.

The legitimacy of lifetime heathen slavery and inherited slaves ended with Israel's final jubilee year in A.D. 70. In principle, that jubilee event came with Christ's announcement of the meaning of His ministry (Luke 4:16–21). But the development of this jubilee principle of release progressed for one generation until God destroyed Jerusalem, in order to destroy the liturgical and political foundations of the Jewish religious leaders who had

refused to let their spiritual slaves go free. The leaders had rejected Christ's message of final jubilee release, and so had most of their spiritually enslaved followers; in response, God destroyed their civilization. Jesus Christ was in principle an abolitionist, for He was the fulfillment of the jubilee year principle, the great year of release. His fulfillment of the jubilee year announced the advent of His New World Order.

Nevertheless, He did not verbally require an overnight (or seven-year) program of manumission or abolition. As is the case with many of the implicit social and economic principles of the Bible, Jesus established the principle of abolition, and He was then content to wait for His people to acknowledge it and put it into action in history. He waited for seventeen centuries.

A. Bondage and Deliverance

Critics of Christianity continue to bring up the issue of slavery in their war against Christianity. They seek to make Christians feel guilty regarding Christianity's theological and historical legacy. Christianity unquestionably condoned and even sanctioned chattel slavery until the nineteenth century. They trace this judicial sanctioning of chattel slavery back to the Old Testament. In this way, they seek to create a sense of guilt and doubt in their targeted victims. They understand that guilt-ridden people are not effective opponents of the prevailing messianic social order. That the Christians failed for many centuries to challenge chattel slavery is a black mark in the history of the church. But to lay the blame at the doorstep of the Bible is either a mistake or an ideological strategy.

Without a proper understanding of the theological foundation and institutional functions of indentured servitude in the Old Testament, the reader will be baffled by several of the case laws of Exodus. Modern man's automatic negative reaction against the word "slavery" makes it imperative that the serious Bible student understand the biblical concept of servitude before he begins a study of Exodus 21; otherwise, he will be tempted to conclude in advance that these case laws do not apply today, that they were designed for use by "primitive desert tribes" rather than designed for use by all societies everywhere.

The case laws of Exodus begin with rules governing slavery (actually, temporary indentured servitude). This is appropriate, for two reasons. First, as I have written, the Pentateuch is structured in terms of the five-point biblical covenant model: sovereignty, hierarchy, ethics, judgment, and in-

heritance. Exodus, the second book, is concerned with the question of hierarchy. It asks this crucial question: "Which God should man serve?" The book of Exodus presents God as the God of history who delivers His people from oppression.

The second reason why the case laws begin with laws governing bondservice is that the Israelites had just been delivered out of permanent slavery. They were ready to hear about laws governing servitude. We should recognize the obvious: civil laws making slavery as oppressive as the system that had governed them in Egypt would not have been laws imposed by the God of liberation on a nation that had suffered years of unjust oppression. Thus, we should recognize that *these laws were a loosening of the bonds of servitude, not a tightening.* Furthermore, to ridicule the case laws of Exodus that govern bondservice is in effect a call for a return to Egyptian bondage, namely, bondage to the autonomous State. Bondage is an inescapable concept. It is never a question of 'bondage vs. no bondage.' It is a question of "bondage to whom?"

The Israelites had just been delivered out of bondage. The whole book deals with the theme of deliverance from bondage into sabbath rest. Thus, having just been delivered from slavery, God caught their attention by beginning the case law section with laws governing servitude. He confronts people "right where they are" in life. The Israelites were in the wilderness, in transition spiritually and culturally from Pharaoh's slavery to God's servitude. Biblical servitude is one of God's authorized modes of transition from wrath to grace (blessing), both personally and culturally. Pagan slavery, in contrast, is one of God's ethically unauthorized but historically imposed modes of transition from grace to wrath (cursing) for His people: bondage in Egypt, Assyria, and Babylon. Becoming a slave-master over God's people is prohibited, yet God raises up such tyrants as a form of judgment against His people and the tyrants themselves (Jeremiah 25). What the New Testament says of Judas applies to slave-masters generally: "For the Son of Man indeed goes as it has been determined. But woe to that man through whom he is betrayed!" (Luke 22:22).

Biblically speaking, there can never be a release out of servitude as such, although there can be a release out of human slavery. Men serve one of two masters, God or mammon, meaning God or Satan. The great warfare in history between God and Satan is the war for the covenantal allegiance of men. Men's institutions reflect the nature of the servitude they have chosen:

bondservice under God or slavery to Satan. Permanent slavery of man to man is the system that covenant-breaking man autonomously (self-law) establishes, thereby imitating Satan: a system of permanent tyranny. God publicly smashed this permanent slave system at the exodus. In contrast, hierarchical temporary bondservice of man to man under biblical law is the system that God has established for the reformation of covenant-breaking men, which in turn reflects His permanent covenantal rule. Indentured servitude always points to liberty, meaning covenant-keeping liberty under God. Covenant-keeping men are institutionally subordinated to God in terms of a law-order that progressively brings long-term prosperity and liberty (Deuteronomy 28:1–14). Servitude is inescapable, but the forced system of bondage known as indentured servitude is used by God to bring self-discipline and maturity to His covenant people. This temporary legal servitude of man to man reflected God's judicial relationship to His people in the Old Covenant era, in which He delivered them from Egypt by placing them under His covenant, but one which was temporary. It would be replaced by a better covenant, Jeremiah announced: "Look, the days are coming—this is the Lord's declaration—when I will establish a new covenant with the house of Israel and the house of Judah. It will not be like the covenant that I established with their fathers in the days when I took them by their hand to bring them out from the land of Egypt, because they broke my covenant, although I was a husband for them. This is the covenant that I will establish with the house of Israel after these days —this is the Lord's declaration. I will place my law within them and will write it on their heart, for I will be their God, and they will be my people" (Jeremiah 31:31–33).

B. Six Forms of Mosaic Slavery

When English-speaking people use the word "slavery," they have in mind especially the West's Negro slave system, or perhaps some other system of permanent slavery. The word produces an immediate negative response. This is why it has been so difficult for Christians to discuss the Old Testament institution of slavery in a calm, analytical manner.

First, the only form of inter-generational slavery in the Old Testament was the enslavement of foreign heathens. The children of these slaves were the possession of the family that owned the parents (Leviticus 24:44–46). This slave law was abolished with the fulfillment of the jubilee year by Jesus (Luke 4:18–19). [North, *Luke*, ch. 6] Second, the other five kinds of slavery

applied to Hebrews. To understand these, we must first understand that God was placing the Hebrews under a form of temporary indentured servitude, to test them, teach them, and provide them with the self-discipline necessary for spiritual and cultural maturity. Wherever there is sin, there must remain some traces of the institution of indentured servitude, although there is progressive release from the visible manifestations of this system as men and societies progressively conform themselves to the ethical terms of God's covenant (point three of the covenant model).What God established for a certain class of Hebrew citizens was more like a system of indentured servitude, at least for the Israelites in their dealings with fellow believers. Five forms of servitude for Hebrews existed in ancient Israel.

1. Debt servitude for up to almost six years (Deuteronomy 15:12–15)
2. Voluntarily servitude for up to 49 years (Leviticus 25:39–41)
3. Up to 49 years as a slave in a resident alien's household (Leviticus 25:47–52)
4. Restitution slavery for convicted criminals (Exodus 22:3)
5. Voluntary lifetime servitude in a Hebrew's household (Deuteronomy 15:15–16)

I discussed these five forms of servitude in Chapter 4 of my book, *Tools of Dominion: The Case Laws of Exodus* (1990), pp. 125–37. The chapter is titled "A Biblical Theology of Slavery." It is over 90 pages long. I refer you to an online PDF of that book. (http://bit.ly/gntools) Most of this chapter comes from that chapter.

C. Indentured Servitude

The Mosaic law's system of indentured servitude stands in stark contrast to the system of permanent slavery in classical Greece. Those humanists who appeal to Greece as the supposed cradle of Western civilization, equal (and probably greater) in importance to Christianity, have a public relations problem with this fact. The city-states of Greece's "glorious" era after the seventh century B.C. allowed citizens to enslave each other perma-

nently. They could sell their children into slavery in some cities (e.g., Thebes). Socrates (according to Plato, who was the most successful ghost writer in Western history), complained against the practice of Greeks' enslaving other Greeks captured during wartime. Indentured servitude functioned in the Hebrew commonwealth as a means of dealing with men who were unwilling or unable to manage their own affairs. Indentured servitude provided tools, supervision, education, food, shelter, and some of the comforts of prosperity to those without capital. It also provided security. It was a way of building a capital base. Jacob served Laban for seven years in order to earn Rachel as his wife (Genesis 29:20). He became, in effect, an indentured servant. The point is, he waited. He was a future-oriented man. He was also an independent man who amassed a great deal of capital in his 20 years of service (7 + 7 + 6) to his corrupt uncle and father-in-law.

In his book, *Politics of Guilt and Pity* (1970), R. J. Rushdoony summarized several aspects of the Old Testament's system of indentured servitude: "In the biblical form, slavery was rather a form of bond-service. The term 'servant' or 'slave' was used to describe anyone owing service to another, permanently or temporarily. Thus, David and Daniel described themselves as God's servants (Ps. 27:9; Dan. 9:17), and the virgin Mary described herself as 'the handmaiden of the Lord' (Luke 1:38). Biblical slavery was a form of feudal association and protection. The stealing of men for purposes of sale was strictly forbidden by law, so that what is popularly known as slavery was outlawed (Deut. 24: 7), and Paul restated this condemnation and associated 'men-stealers' with 'whoremongers,' homosexuals, liars, perjurers, and heretics (I Tim. 1:10)" (p. 23). He added that this is not to say that indentured servitude is morally wrong. It is simply an inferior way of life that should not be preferred by Christians. "From the biblical perspective, therefore, slavery is not itself intrinsically evil; the failure to live as free men, the dependency or incompetence of a slave mind is, however, regarded as an inferior way. The believer cannot revolt against his situation, but he cannot become a slave in good conscience, voluntarily, for any form of slavery is an infringement of Christ's total rights over him (I Cor. 7:22, 23)" (p. 24).

D. Restitution to Victims

A considerable percentage of the case laws of Exodus 21–23 is devoted to a defense of the biblical concept of penal restitution. Convicted criminals are supposed to make restitution payments to their victims. There is no

restitution system in today's penal systems anywhere on earth. This is the "dirty little secret" of those atheists, pietists, and antinomians who ridicule the biblical system of slavery: they have accepted the horror of unproductive imprisonment in place of the biblical institution of penal labor servitude, out of which an industrious slave could purchase his freedom.

If the criminal in ancient Israel was financially unable to pay his victim, his sale to a slave-buyer was what provided the victim with his lawful restitution payment. The prison system has always been the Bible-hater's preferred substitute for the Mosaic law's system of law-restricted labor servitude. In short, in order to enforce the Bible's principle of economic restitution to victims by criminals, there always has to be a more fearful support sanction in reserve: death, imprisonment, whipping, banishment, or indentured servitude. But only one of these reserve sanctions raises money for the victims: indentured servitude. The critics of biblical law just never seem to remember to mention this fact.

The thief is always fully liable economically to make restitution for his criminal acts. "If he has nothing, then he must be sold for his theft" (Exodus 22:3b). It was the threat of compulsory labor servitude (bondservice) that reinforced the Old Testament's judicial sanction of economic restitution from criminals to their victims. If a poor man committed an economic crime against someone, he had to repay his victim; he did not pay restitution to the state, nor did the state pay restitution to his victims. The punishment therefore fit the crime, for the restitution payments were proportional to the losses that the crimes had inflicted. There was no respect of persons in biblical law: the same sanction applied to all, rich and poor. If the criminal was unable to pay his victim, he was sold into slavery in order to raise the money necessary for repayment. This sale for cash was possible only because a buyer expected to profit from the transaction. He expected to gain a net return from the future productivity of the slave. He was therefore willing to capitalize this expected future productivity by means of a cash payment to the victim.

The criminal's term of service was limited in three ways. First, the extent of the damage he inflicted on his victims determined the amount of restitution that he owed to them. This established a ceiling on the price the slave-buyer was asked to pay. The worse the damage, the higher this ceiling price. Second, the price that the victim received from the buyer was proportional to the time the criminal was expected to serve as a slave. He was al-

lowed to buy his way back into freedom; thus, the lower the initial purchase price, the sooner he could become a free man with any given level of economic performance. Third, because he was allowed to redeem himself at any time by paying the owner the pro-rated value of his remaining term of service (Leviticus 25:50–52), it follows that the more productive he became as a slave, the sooner he could become a free man. The length of the period of enslavement was inversely related to the ethical performance of the criminal: *the better his performance, the shorter the sentence*. The punishment fit both the crime and the program of rehabilitation through restitution.

E. Modern Criminal Servitude

The modern prison system is the product of the perverse logic of humanism. Humanists do not believe in making eternal restitution to the God of the Bible. They reject the doctrine of hell and the lake of fire. Nevertheless, the doctrine of hell is an inescapable concept. The question is: "Who will impose it, man or God?" The prison is the modern humanist State's equivalent of hell: an unproductive place of confinement from which the prisoner cannot legally buy his freedom. The prison is a widely acknowledged institutional failure, but humanists cannot bring themselves to abandon it, because in order to do so, they might be forced to reconsider their denial of the biblical principle of restitution to victims, as well as its economic concomitant, legalized bondservice. They much prefer the slavery of unproductive, taxpayer-financed prison sentences to the Bible's system of bondservice, a bondservice which points all too clearly to God's eternal punishment of unrepentant rebels who refuse to accept God's exclusive system of restitution: the substitutionary atonement of Jesus Christ.

"Serving time" in prison is today preposterously referred to as "paying one's debt to society." In fact, the reverse is true: society (taxpayers) must finance the criminal's period of incarceration. Taxpayers and criminals alike pay a debt to the state, for it is the state's bureaucratic functionaries who become the recipients of the tax money. The state, as the operational god of this age, receives its restitution payment. But in today's humanistic theocracy, victims receive nothing except subpoenas to testify in court and bills from the tax collector. In the Old Testament, "serving time" meant serving other men productively in a compulsory employment system that benefitted everyone: victims, slave-buyers, criminals who learned obedience and work skills, and society at large, which always needs sanctions

against criminals to protect itself. Today, the sanctions are themselves criminal: they penalize the victims a second time (tax bills for prisons). The victims are robbed twice. They are threatened with violence if they refuse to pay: first by the robber, then by the tax collector.

F. The Enslavement of Heathens

The question of heathen slavery then arises. Did this same ethical and cultural goal of personal independence govern the enslavement of the heathen in Israel? Were they also to become the beneficiaries of God's covenant blessings? Could they also find freedom in Israel? Was their enslavement permanent? The Hebrews repeatedly violated God's requirement that they annihilate the Canaanites. Instead, the tribes made local Canaanites pay tribute to them, which was only legitimate in distant foreign wars (Deuteronomy 20:11). [North, *Deuteronomy*, ch. 48:C] The Canaanites of Ephraim's land paid tribute to them, but were not driven out (Joshua 16:10). The same was true of Manasseh (Joshua 17:12–13; Judges 1:28) and Zebulun (Judges. 1:30). The Hebrew tribes preferred to receive tribute rather than continue the war. The result, as God had predicted, was repeated apostasy. The Hebrews began to follow the gods of Canaan. For this sin, God repeatedly placed them in slavery to foreigners, whose societies were based on worshipping the demonic "first cousins" to the gods of Canaan.

Once the land was cleared of Canaanites, Israel was then supposed to use indentured servitude only to subdue evil "within the camp'—repayment for debt and criminal restitution—and, in the case of foreign slaves, to remove them from bondage to foreign gods and to place them under lifetime slavery as a means of evangelism. Foreign heathen adults and the children of resident aliens were to be redeemed—bought out of bondage to demons and placed under the authority of godly households (Leviticus 25:44–46). The jubilee slave law unquestionably taught that it was legal for the Hebrews to import slaves from foreign lands. These outsiders were moral slaves because they were in subordination to foreign gods. They had been judged externally by God, having been sold to Hebrew families by their military conquerors or else by their nations' own slave merchants.

Because pagan slaves could be purchased for a lifetime of service, and because their children would become the property of the owner's heirs, they would have commanded higher purchase prices than Hebrew indentured servants. The present price of any asset is its expected net return over its

expected term of service, discounted by the prevailing market rate of interest. The longer its expected net return, the higher the price. The pagan slave could legally produce a lifetime of service; his market price would have reflected this fact. Add to this the future value of his heirs' productivity, and we can safely conclude that pagan slaves would have commanded a higher market price than Hebrew indentured servants. An indentured servant could legally produce a stream of income for a much shorter period unless he voluntarily sold himself into permanent servitude (Exodus 21:5–6), something that the buyer could not have safely predicted at the time of purchase. There was no long-term market for non-criminal Hebrew servants. In contrast, Hebrew criminals could be purchased for a price sufficiently high to pay their victims; thus, they could be placed into lifetime slavery, just as if they were pagan aliens. Still, there were greater risks associated with bringing a convicted criminal into a household. This would have depressed their prices somewhat.

A family could lease a neighboring piece of property for up to half a century, but then it reverted to the original family. We know that large families are a sign of God's covenantal blessing (Psalm 127:3–5). The larger that Israel's families grew in response to the nation's covenantal faithfulness to God, the smaller each family's inherited land holding would become. This made it economically impossible for any branch of a family to amass a large number of heathen slaves during periods of God's covenantal blessings, for it was illegal to amass permanently the large tracts of land that were necessary for the support of slaves. Thus, at the beginning of each jubilee year, when all land holdings reverted to the heirs of the original land-owners, most heathen slaves would have been released by their owners, whether or not the law allowed them to retain ownership of them indefinitely. They were allowed to buy the land in these walled cities, where the jubilee land laws did not apply (Leviticus 25:29–33). Those heathen who remained in slavery would have been parceled out among inheriting Hebrew children when the heirs returned to their share of the family's traditional lands, thereby reducing the possibility of large-scale slave gang labor. It would also have increased the likelihood of manumission: freedom for slaves whose economic productivity, without large land holdings, would have dropped sharply. In other words, by reducing Israel's per capita capital (land), the jubilee land tenure law would have reduced labor productivity for all those who remained in Israel. This was the whole idea: to encourage covenantal

dominion outside the land by encouraging Hebrew emigration.

Slavery clearly was not supposed to become a major institution in Israel. Land and labor are complementary factors of production. The larger the population grew—a promised blessing of God—the more valuable land would become; the more valuable the land became, the less would be the return from net economic rents produced by slaves. Free laborers and tenants would be willing to work for low wages for as long as they remained in the land of Israel; slavery would offer no important economic advantages to rent-seekers. The primary economic goal in such a land-starved economy would have been to add to one's land holdings, not to one's supply of slaves. Without cheap land, or increasingly productive land, permanent agricultural slavery is unlikely to be maintained long term. Under circumstances of increasing land scarcity, the reasons for holding slaves would then be more consumption-oriented than production-oriented: slaves as status symbols, i.e., consumer goods rather than producer goods.

What we must understand from the beginning is that the whole economic thrust of the jubilee land tenure laws, when coupled with God's promise of population growth for national obedience, was to push the Israelites out of the land, and therefore outside the geographical boundaries where the jubilee land law, including its slave laws, operated. The jubilee law's goal was world missions and covenantal dominion, not the permanent enslavement of heathens inside tiny Israel.

Yet even in the case of Leviticus 25, God's goal was always liberation. These pagans were being purchased out of their covenantal slavery to demonic religion. They were being redeemed (bought back). They were being given an opportunity to hear the gospel and see it in operation in households covenanted to God. They were being given an opportunity to renounce paganism and thereby escape eternal slavery in the lake of fire. Obviously, if the legal provision that allowed Hebrew families to retain the lifetime services of heathen slaves, as well as to transfer ownership of the heathens' children to the Hebrews' children, is severed from the jubilee land tenure law, then the economic possibility of establishing slave gangs becomes a reality. The legal restriction against the permanent amassing of land disappears. Thus, to argue that the lifetime slave-holding provisions of Leviticus 25 were not an integral part of the jubilee land tenure system is to argue that the history of chattel slavery in the West was in principle sanctioned by the Bible. I am arguing the opposite: the lifetime slave-holding provisions of Le-

viticus 25 were an integral aspect of Israel's Jubilee land tenure laws) and therefore when God annulled the latter, He also annulled the former. By transferring legal title to His kingdom to the gentile world (Matthew 21:43), and by visibly annulling Israel's legal title to the land of Palestine at the time of the fall of Jerusalem in A.D. 70, God thereby also annulled the Hebrew land tenure laws. What had been a God-approved spoils system for a unique historical situation—the military conquest of Canaan by Israel—became a dead letter of biblical law after the fall of Jerusalem.

Conclusion

The Christian gospel liberates men from the tyranny of sin. Jesus' pre-crucifixion ministry was laying the foundations of the gospel. What was definitive—liberation—was broader than the internal life. Jesus was extending Isaiah's prophecy to the whole world and its institutions. The jubilee year had come definitively, not just for Israel, but for redeemed mankind everywhere. Jesus was laying the foundations for liberty. This included economic freedom. The poor would be the beneficiaries.

The doctrine of perpetual slavery is nothing special when compared to the doctrine of eternal damnation. In fact, perpetual slavery is an institutional testimony to the reality of eternal damnation. It should direct the slave's attention to the fate of his eternal soul. (It should also direct the master's attention to the same issue.) Slavery was designed by God to be a means of evangelism in the Old Testament. The question can therefore legitimately be raised: "Is it a means of evangelism in New Testament times?" For instance, why did Paul send the runaway slave Onesimus back to his master Philemon (the epistle to Philemon)? But anyone who dares raise this obvious question today faces the verbal wrath of Christian pietists and antinomians everywhere, not to mention secular humanists.

God punishes deceased covenant-breakers forever, not in order to reform them, but because they refused to be reformed by God's saving grace in history. Hell is not a reform school; it is a place of eternal retribution. God therefore holds ethical rebels in perpetual slavery. God is in this sense the Cosmic Slaveholder. They do not work in order to please this Cosmic Slaveholder; they are stripped of the power to work, for labor is an aspect of dominion. They serve Him exclusively as recipients of His incomparable wrath. We may not like the idea, but this is what He says He has done and will do. No one ever escapes God's eternal slave system if he departs from

this life as a moral slave to Satan rather than a moral bondservant to God. There is no "underground railroad" out of slavery in hell. This is why Christians offer the gospel of salvation to rebels against God: to enable them to escape eternal punishment and eternal slavery to the Sovereign Master of the eternal fiery whip.

In history, we are either involuntary slaves to God or voluntary bondservants to God. Both conditions are permanent beyond the grave. We either serve Him willingly in this lifetime, openly acknowledging our status as unprofitable servants in His covenantal household, or else beyond this life we will experience perpetual lashes from His judgmental whip as eternal slaves without hope. There is no middle ground. There is no alternative scenario. Being a bondservant to God is the essence of freedom. Being a slave to God is the essence of hell. Choose this day which condition of servitude you prefer.

God works through history, bringing theological anomalies to light, pressuring His people through historical forces to rethink their theological presuppositions. There is no better proof of this than the history of slavery. Lifetime chattel slavery was wrong in principle from the day that Jesus read in the synagogue (Luke 4), but it was not so great an evil that God felt compelled to reveal to the New Testament authors that they should stand against it publicly, making abolition a major dividing line between Christians and non-Christians. Slavery was not among the adiaphora—things of little importance—but it was not a major ethical issue, either. It was like representative constitutional government: implicit in the principles of biblical self-government, but not a top-priority theological issue in the first century. The church and the world could deal with other more pressing issues first.

When the economic means of abolition appeared—modern industrial capitalism—abolition could then become a top-priority issue in history, and did. The moral anomaly of slavery became too expensive an institutional anomaly for a Christian-influenced civilization to sustain. It was capitalism that made it too expensive. How? By lowering the price of alternative social and economic relationships. This economic process of social price competition combined with the newly popular philosophy of republican self-government (which was also an inevitable though delayed outgrowth of Christian social philosophy) to remove moral legitimacy from slavery. The productivity of capitalism's mass-produced cotton gin on the plantation could not offset the moral and political effects of this erosion of

slavery's moral legitimacy.

God still operates in history, making clear to His people what His principles are, and enabling them to conform their lives to His word. It takes time, but eventually we learn. He does not have to spell out everything in His inspired revealed word in order for us to work out His principles in our lives and in our societies over time. We have the Ten Commandments and the case laws.

Those who follow the Enlightenment tradition of tracing modern freedom and culture back to classical Greece and Rome seldom come to grips with the economic foundation of classical civilization: slavery—a problem that Enlightenment philosophes never overcame with respect to either classical slavery or modern colonial slavery. Historian M. I. Finley is correct: "Anyone who clings to the cause of neo-classicism or classical humanism has little room for manoeuvre" on the subject of slavery. It was the late-medieval scholastic philosophers, specifically the School of Salamanca, which also pioneered free market economics, who tried to check the evils of the new system of slavery and the wars of colonial conquest.

CONCLUSION TO PART 5

The first to plead his case seems right until his opponent comes and questions him (Proverbs 18:17).

For a millennium and a half, the Roman Catholic Church opposed interest-bearing loans. So did Eastern orthodoxy. This outlook was not challenged by any major theologian until John Calvin began to make modifications in the middle of the sixteenth century. Today, no major theologian in the Roman Catholic Church accepts the prohibition. The church's leadership changed its collective mind in the late nineteenth century.

With respect to the prohibition against usury, the Christian church did not do its homework for a millennium and a half. This was a serious mistake. The best that we can say for it is that the church by the late Middle Ages had found theological work-arounds that enabled businessmen to evade what the church had clearly taught since at least the Council of Nicaea. I quote the great expert in these matters, John T. Noonan. He was the premier historian of the Catholic Church's position on usury/interest. He was an American judge, professor, and distinguished Catholic historian. In 1999, he wrote this summary of the Church's shift in views. The article appeared in the Catholic magazine, *America.* "Beginning about 1150 the moral rule was laid down that it was wrong to make a profit from a loan. 'Lend freely, hoping nothing thereby,' was papally interpreted as a commandment. Popes, councils, bishops, theologians joined in the condemnation of usury, understood as anything added to the principal of a loan. In the 16th century, as the economy of Europe became more commercial, profitable alternative ways of extending credit were recognized by theologians engaged in a fierce battle with curial conservatives. By the 18th century the old usury rule was a shadow, formally maintained by the papacy, ineffective in practice. By the 20th century, investments in banks were commonplace for popes, bishops and ordinary Christian folk. What had been prohibited had become lawful."

With respect to the interpretation of the jubilee year as justifying widespread debt repudiation in the modern world, I am aware of no major theologian who has defended this position in print. The idea is unacceptable in the modern world generally, and by refusing to invoke the actual text of the jubilee law, the political activists who have promoted the idea should not be taken seriously. They do not take the Mosaic law seriously. It is simply the misuse of the Bible to promote an idea that the Bible never taught.

The Mosaic laws governing slavery were never studied carefully by Christian theologians until the late eighteenth century. That was when the issue of abolitionism became a major political issue. The abolitionists did not invoke the key passage that would have defended their position: Christ declaration of his ministry is the fulfillment of the Jubilee year (Luke 4:18–19). [North, *Luke*, ch. 5] The defenders of slavery obviously did not quote it. They quoted Leviticus 25:44–46, and they quoted it often. [North, *Leviticus*, ch. 30]

Most Christian theologians do not take seriously the Mosaic law. They do not think that most of the Mosaic law is binding in the modern world or in New Testament times generally. With respect to the economic provisions of the Mosaic law, neither the theologians nor the political activists are serious about studying in detail what these laws actually taught. They do not offer a clear principle of interpretation (hermeneutic) that tells us on what basis we should accept or reject the continuing authority of any of these laws.

If you decide to pursue the calling of becoming a Christian economist, I strongly recommend that you spend a great deal of your time studying the actual text of the Mosaic laws that apply to economic theory or economic practice. I did this on a systematic basis from 1973 until 2012. You must do your homework.The slogans associated with international debt repudiation have not been taken seriously by the secular world. What began as left-wing social gospel propaganda in the 1970s has spread to the Roman Catholic Church by 1999. Pope John Paul II invoked the jubilee principle in defending a vague call for debt repudiation. None of this was spelled out. None of it has ever been spelled out. He announced: "In light of the imminent Great Jubilee of the Year 2000, and recalling the social significance that Jubilees had in the Old Testament, I wrote: 'In the spirit of the Book of Leviticus (25:8–12), Christians will have to raise their voice on behalf of all the poor of the world, proposing the Jubilee as an appropriate time to give thought, among other things, to reducing substantially, if not cancelling outright, the international debt which seriously threatens the future of many na-

tions.'" The Church's Great Jubilee of the year 2000 has come and gone. It has left no trace. Most things don't.

The longer that you do your homework, the fewer misinterpretations you will make. But it is better to risk making a misinterpretation then not doing the hard work that it takes to develop accurate interpretations. The important thing is this: when you correct your misinterpretations, you do so on the basis of a large body of work based on accurate interpretations. If you don't do this, somebody else will, assuming that your misinterpretation is important enough to deserve correction.

Part 6
STATE

INTRODUCTION TO PART 6

Let every soul be obedient to higher authorities, for there is no authority unless it comes from God. The authorities that exist have been appointed by God. Therefore he who resists that authority opposes the command of God; and those who oppose it will receive judgment on themselves. For rulers are not a terror to good deeds, but to evil deeds. Do you desire to be unafraid of the one in authority? Do what is good, and you will receive his approval. For he is a servant of God to you for good. But if you do what is evil, be afraid; for he does not carry the sword for no reason. For he is a servant of God, an avenger for wrath on the one who does evil. Therefore you must obey, not only because of the wrath, but also because of conscience. Because of this you pay taxes also. For authorities are servants of God, who attend to this very thing continually. Pay to everyone what is owed to them. Tax to whom tax is due, toll to whom toll is due; fear to whom fear is due, honor to whom honor is due (Romans 13:1–7).

For orthodox Christians, there is no escape from this passage. It affirms without qualification the legitimacy of civil government. The civil magistrate possesses God-given authority. Paul spoke of the magistrate as a *diakonos* [servant] of God (v. 4). A Christian who affirms the authority of the Bible must also affirm the authority of civil government. This has been the universal testimony of the church.

A. Multiple Authorities

Paul spoke of higher powers. Strong's Concordance defined the Greek word *exousia* as follows: "(in the sense of ability); privilege, i.e.(subj.) force, capacity, competency, freedom, or (obj.) mastery (concr. magistrate, superhuman, potentate, token of control), delegated influence: authority, jurisdiction, liberty, power, right, strength." This applies to more than one cove-

nantal authority. There are multiple hierarchies in this life. God has created competing jurisdictions in order to eliminate the possibility of an absolute centralized tyranny. This is the lesson through the ages of the tower of Babel. There was one people with one confession of faith: faith in autonomous man (Genesis 11:6–8). [North, *Genesis*, ch. 19:A] Paul said here that lawful authorities deserve obedience. He did not say or imply that there is only one lawful institutional authority that must be obeyed.

In his confrontation with the high priest, recorded in Acts 23, Paul affirmed this position. Even though he was an apostle and in possession of lawful authority, he did not deliberately challenge the high priest. "Paul looked directly at the council members and said, 'Brothers, I have lived before God in all good conscience until this day.' The high priest Ananias commanded those who stood by him to strike him on the mouth. Then said Paul to him, 'God will strike you, you whitewashed wall. Are you sitting to judge me by the law, yet order me to be struck, against the law?' Those who stood by said, 'Is this how you insult God's high priest?' Paul said, 'I did not know, brothers, that he was high priest. For it is written, "You shall not speak evil of a ruler of your people'" (Acts 23:1–5). Paul honored lawful authorities.

Paul lived under the rule of Nero, a tyrant by any standard. Yet he wrote: "For rulers are not a terror to good deeds, but to evil deeds. Do you desire to be unafraid of the one in authority? Do what is good, and you will receive his approval. For he is a servant of God to you for good. But if you do what is evil, be afraid; for he does not carry the sword for no reason. For he is a servant of God, an avenger for wrath on the one who does evil" (Romans 13:3–4). [North, *Romans*, ch. 11] Christians are to do good deeds, gaining praise from their rulers. God has set rulers in seats of authority to be a terror to evil-doers. Let these rulers devote their efforts to overcoming their enemies, not look for rebellious Christians to prosecute. There are rulers who themselves are evil and allied with evil men. Nevertheless, Paul said to obey. The goal of governments is to defend social order.

God has built into human nature the desire to live in a predictable world. For predictability, there must be rules and sanctions. This is why rules and sanctions make life easier. Every government has rules. It enforces its standards with sanctions. Most civil rulers want more authority for themselves. They want things to run smoothly, meaning predictably. The closer to righteousness that civil laws are, the more voluntary cooperation rulers will gain from the public. Rulers cannot rule without citizens who

voluntarily cooperate. If everyone refused to obey a law, there would not be enough police to enforce it. This is why rulers prosecute a representative figure. This sends a message to the public: "If you don't obey, and everyone else does, we'll get you." But there comes a day when many people take a chance and deliberately disobey the law. They refuse to cooperate with the civil government. On that day, the illusion of state omnipotence ends. In my era, the best example of this was the failure of the Communist Party of the Soviet Union to maintain control, beginning in mid-August 1991. On December 25, the USSR went out of existence.

Paul's discussion of institutional authorities follows a passage that challenges personal vengeance. "Repay no one evil for evil. Do good things in the sight of all people. If possible, as far as it depends on you, live at peace with all people. Do not avenge yourselves, beloved, but give way to the wrath of God. For it is written, 'Vengeance belongs to me; I will repay,' says the Lord" (Romans 12:17–19). [North, *Romans*, ch. 10] If personal vengeance is wrong, then how does God bring vengeance in history? Through civil government. The text does not say that vengeance is wrong. It says that God possesses final authority to impose vengeance. He has delegated the authority to impose physical vengeance to two governments: civil and family.

Peter agreed with Paul on this point. "Obey every human authority for the Lord's sake. Obey both the king as supreme, and also the governors, who are sent to punish evildoers and to praise those who do good. For this is God's will, that in doing good you silence the ignorant talk of foolish people. As free people, do not use your freedom as a covering for wickedness, but be like servants of God. Honor all people. Love the brotherhood. Fear God. Honor the king" (I Peter 2:13–17).

Neither Peter nor Paul demanded obedience to civil government at the expense of obedience to other lawful governments. Peter explicitly told the Jewish leaders, "We must obey God rather than men" (Acts 5:29b). Yet they had the authority to beat him, which they did (Acts 5:40). He submitted to the beating, but not to their command to stop preaching the gospel. He disobeyed, but he submitted to the sanctions for the sake of his disobedience. So did Paul. My point is this: Peter and Paul self-consciously operated within the existing Roman legal system. Paul understood Roman law, and as a Roman citizen, he invoked it. "Paul said, 'I stand before the judgment seat of Caesar where I must be judged. I have wronged no Jews, just as you also very well know. Though if I have done wrong and if I have done what is

worthy of death, I do not refuse to die. But if their accusations are nothing, no one may hand me over to them. I appeal to Caesar'" (Acts 25:10–11). His words, "I do not refuse to die," affirmed the legitimacy of civil government, including capital punishment. But, at the same time, he appealed to Caesar to escape the jurisdiction of Festus, who Paul believed was acting on behalf of the Jews. This was consistent with his affirmation of the ministerial office of civil magistrates.

The anarchist rejects all forms of civil government. He can point to every kind of tax as distorting the free market. He insists that the free market should be legitimately autonomous. But then come the problems of violence and sin. How can these be predictably restrained? The biblical answer is government, including civil government. In the anarchist's world of profit-seeking private police forces and profit-seeking armies, the result is inevitably a warlord society. Militarily successful private armies will always seek to establish their monopolistic rule by killing the competition, literally. Civil governments always reappear. They are one of God's four ordained systems of government: self-government, church government, family government, and civil government. All four are sealed by an oath. All four involve sanctions.

Sin mandates civil government and civil sanctions. The right of civil rulers to impose physical punishments is affirmed clearly by Paul in Acts 25. He affirmed in Romans 13 the legitimacy of civil government among other legitimate governments. He said that rulers are ordained by God. This is powerful language. It invokes the authority of God on behalf of the state. If Paul is correct, then anarchism is incorrect. There is no way around this exegetically. This has been the teaching of all branches of the Christian church from the beginning. There has been unanimity on this point, as on few others, other than the Trinity.

B. Crime vs. the Peaceful Division of Labor

The threat of crime forces men to allocate scarce economic resources to the defense against criminals. The state is the primary institutional means of crime prevention. It imposes negative sanctions on convicted criminals. The state's God-given goal is to uphold justice by means of widespread fear. Moses said: "The judges must make diligent inquiries; see, if the witness is a false witness and has testified falsely against his brother, then must you do to him, as he had wished to do to his brother; and you will remove the evil from among you. Then those who remain will hear and fear, and will from

then on commit no longer any such evil among you. Your eyes must not pity; life will pay for life, eye for eye, tooth for tooth, hand for hand, foot for foot" (Deuteronomy 19:18–21). [North, *Deuteronomy*, ch. 45:A] Fear adds to the cost of criminal behavior. When the cost of anything increases, other things remaining constant, less of it is demanded. This is the goal of negative civil sanctions: less crime. Institutional authorities seek to reduce crime by imposing negative sanctions on law-breakers.

The costs of crime-prevention reduce men's wealth. People believe that such expenditures prevent an even greater reduction of their wealth by criminals. People find it more expensive to cooperate when crime increases. Their lives and property are less secure. Crime makes them more cautious about entering into cooperative ventures with people they do not know well. The information costs of dealing with strangers are high, and some people choose not to take these extra risks. This is why, because of sin, the division of labor is reduced. Crime-prevention expenditures reduce risk and increase the level of cooperation.

To maximize the division of labor in a world of sin, the state must impose negative sanctions only on law-breakers, biblically defined. It must conserve resources by not prosecuting innocent people. The Bible offers authoritative guidelines on what the state should prosecute. By adding laws that go beyond the Bible, or even go counter to it, civil rulers increase the cost of crime prevention. Legislators and bureaucrats who go beyond the Bible in seeking to stamp out illegal activities make it more expensive for people to cooperate voluntarily to achieve their ends. This reduces the division of labor. It therefore reduces people's wealth. The state thereby produces the same condition that criminals produce. The difference is this: good men feel justified in defending themselves against criminals. They feel far less justified in defending themselves against the state. The predator state can become a greater threat to economic and social cooperation than the predator criminal class. In some cases, the state allies itself with the criminal class.

C. Legitimate Rule

In Part 6, I deal with a few areas of civil government that are legitimate. If I were to deal with those areas of modern civil government that are illegitimate, it would fill several volumes. In the United States, the rules and regulations established by federal bureaucracies are published daily in the

Federal Register. Each issue fills around 200 pages of three-column fine print. In some years, the total number of pages exceeds 80,000. In what I would regard as good years, this may be as few as 68,000. Then there are state governments, county governments, and city governments, each with its own laws and bureaucratic rules.

The crucial service that civil government brings to the social order is a system of justice. To gain the cooperation of the public, the state must threaten negative sanctions. But that is an expensive form of rulership to impose. There must be voluntary cooperation from the broad masses of the public. If the state is perceived as unjust, then it will not gain the degree of voluntary cooperation that would be necessary to extend the power of the state further into people's lives. This is a built-in limitation on the expansion of state power. People will increasingly resist what they regard as unjust rule. This raises the cost to the state of enforcing its growing list of laws and regulations. When the cost of something rises, less is demanded.

The second-most important task of the state is to preserve peace. Paul made this clear. He spoke with respect to the peace of the church: "Therefore first of all, I urge that requests, prayers, intercessions, and thanksgivings be made for all people, for kings and all who are in authority, in order that we may live a peaceful and quiet life in all godliness and dignity" (I Timothy 2:1–2). The greater the degree of peace, the more resources that people are willing to invest in dealing with the limits imposed by cursed scarcity. The fewer resources the people must devote to defending themselves against fraud and violence, the more likely they will be productive. This is basic to free-market economic theory. Ludwig von Mises put it this way in *Human Action*.

> The advantages derived from peaceful cooperation and division of labor are universal. They immediately benefit every generation, and not only later descendants. For what the individual must sacrifice for the sake of society he is amply compensated by greater advantages. His sacrifice is only apparent and temporary; he foregoes a smaller gain in order to reap a greater one later. No reasonable being can fail to see this obvious fact. When social cooperation is intensified by enlarging the field in which there is division of labor or when legal protection and the safeguarding of peace are strengthened, the incentive is the desire of all those

> concerned to improve their own conditions. In striving after his own—rightly understood—interests the individual works toward an intensification of social cooperation and peaceful intercourse (VIII:2).

Mises went on. "State or government is the social apparatus of compulsion and coercion. It has the monopoly of violent action. No individual is free to use violence or the threat of violence if the government has not accorded this right to him. The state is essentially an institution for the preservation of peaceful interhuman relations. However, for the preservation of peace it must be prepared to crush the onslaughts of peace-breakers." He was a representative of nineteenth-century liberalism: limited civil government as a way to defend freedom.

The free market is not autonomous. It is an extension of the individual or the family, both of which operate under civil law. The free market is under civil law. *Civil law covenantally is superior to the free market.* The civil covenant establishes the conditions of the free market by shaping public behavior and attitudes. Civil law is enforced by rulers who are servants of God. Taxation as such is not theft, contrary to some libertarian theorists. Most forms of taxation are theft, and all levels above the tithe surely are (I Samuel 8:15, 17), but not all. [North, *Historical Books*, ch. 14] Lawful authorities are entitled to economic support. Taxation supports the state.

Part 6 is therefore a study of the state is an agency of peacemaking. The individual has no right to impose physical vengeance. "Do not take vengeance or hold any grudge against any of your people, but instead love your neighbor as yourself. I am the Lord" (Leviticus 19:18). [North, *Leviticus*, ch. 16] But, because the state claims a monopoly of violence, it is constantly tempted to expand its power beyond the limitations imposed by biblical law. That was the message of the prophet Samuel to the people of Israel when they sought to create a king. He warned them of the tyranny to come (I Samuel 8). They paid no attention. In the modern world, Christians have also paid no attention. They are paying a heavy price for this lack of concern. They will continue to pay a heavy price until such time as the modern humanistic state bankrupts itself in a vain attempt to fulfill all of the political promises that generations of politicians have made to the electorate. That is when the Christian church will need articulate defenders of limited civil government, meaning civil government limited by biblical law and the

principles that undergird biblical law. I am inviting you to participate in the development of Christian economic theory and Christian political theory that will present a clear and compelling case for biblical limited civil government.

53

JUSTICE

This same law will apply to both the native born and to the foreigner who lives among you (Exodus 12:49).

Do not cause judgment to be false. You must not show favoritism to someone because he is poor, and you must not show favoritism to someone because he is important. Instead, judge your neighbor righteously (Leviticus 19:15).

Jehoshaphat lived in Jerusalem; and he went out again among the people from Beersheba to the hill country of Ephraim and brought them back to Yahweh, the God of their fathers. He placed judges in the land throughout all the fortified cities of Judah, city by city. He said to the judges, "Consider what you should do, because you are not judging for man, but for the Lord; he is with you in the act of judging. Now then, let the fear of the Lord be upon you. Be careful when you judge, for there is no iniquity with the Lord our God, nor is there any favoritism or bribe taking" (II Chronicles 19:4–7).

Analysis

Here we have the clearest statements in ancient literature affirming the judicial principle of the rule of law. This principle is theocentric. "There is no iniquity with the Lord our God, nor is there any favoritism or bribe taking." This is stated repeatedly in the Bible. "Partiality in judging a case at law is not good" (Proverbs 24:23b). "For there is no favoritism with God" (Romans 2:11). "So if you call 'Father' the one who judges impartially and according to each person's work, go through the time of your journey in reverence" (I Peter 1:17).

The Israelites were taught that God applies His law to everybody impartially, even to the king. "When he sits on the throne of his kingdom, he must write for himself in a scroll a copy of this law, from the law that is before the priests, who are Levites. The scroll must be with him, and he must read in it

all the days of his life, so that he may learn to honor the Lord his God, so as to keep all the words of this law and these statutes, to observe them. He must do this so that his heart is not lifted up above his brothers, and so that he does not turn away from the commandments, to the right hand or to the left; for the purpose that he may prolong his days in his kingdom, he and his children, among Israel" (Deuteronomy 17:18–20). This meant that everyone in Israel was required by God to exercise self-government in terms of a predictable standard of law. Law-abiding Israelites expected other Israelites to do the same. This element of predictability was fundamental to the concept of justice under the Mosaic law. People believed that a just government, whether civil or ecclesiastical, would abide by the principle of the rule of law. If governments do this, then people are safe as owners of property. They are protected from unrighteous rulers. Righteous rulers protect them against anyone in society who would violate the laws of God regarding ownership, whether ownership of goods or ownership of personal reputations, meaning people's names.

Basic to the rule of law is the concept of just weights and measures. God makes it clear that just weights and measures are representative of His predictable rulership. "Do not use false measures when measuring length, weight, or quantity. You must use just scales, just weights, a just ephah, and a just hin. I am the Lord your God, who brought you out of the land of Egypt. You must obey all my decrees and all my laws, and do them. I am the Lord" (Leviticus 19:35–37). [North, *Leviticus*, ch. 19:B] Any deviation from just weights and measures in the private sector will be punished by God in eternity. Civil rulers must be prepared to enforce such laws. How much more should magistrates who deviate from honoring the rule of law be punished! The prophets came before the rulers of Israel repeatedly to warn them against such practices. Isaiah was clearest in his covenant lawsuit against the southern kingdom of Judah. "How the faithful city has become a prostitute! She who was full of justice—she was full of righteousness, but now she is full of murderers. Your silver has become impure, your wine mixed with water. Your princes are rebels and companions of thieves; everyone loves bribes and runs after payoffs" (Isaiah 1:21–23a). [North, *Prophets*, ch. 3] Because of this, God's negative sanctions against the nation would inevitably come. "Therefore this is the declaration of the Lord God of hosts, the Mighty One of Israel: "Woe to them! I will take vengeance against my adversaries, and avenge myself against my enemies; I will turn my hand against you,

refine away your dross as with lye, and take away all your dross. I will restore your judges as at the first, and your counselors as at the beginning; after that you will be called the city of righteousness, a faithful town. Zion will be redeemed by justice, and her repentant ones by righteousness. Rebels and sinners will be crushed together, and those who abandon the Lord will be done away with" (vv. 24–28).

The judicial principle of the rule of law is the foundational political principle of Western civilization. That is because it is the foundational principle of Western law. It did not come from the Greeks. It did not come from the Romans. It came from the Mosaic law.

A. Imperfect Justice

I begin with this principle: "citizens want justice." I add this qualification: "at some price." In a fallen world, perfect justice is not available. It is available at the end of time, and will be implemented. Were it not for the grace of God, the guarantee of perfect justice would be a terrifying threat to all of fallen humanity. Perfect justice comes at the final judgment. It will not come before then. It is not possible to attain perfect anything, but surely not perfect justice. The quest for perfect anything is inherently demonic. It is self-defeating. It is self-destructive.

We all would like benefits free of charge. But if we attempt to structure our lives in terms of the presupposition that somewhere, somehow, we can gain benefits free of charge, we will waste our lives in a fruitless quest. We may even be tempted to vote for political candidates who promise the equivalent of something for nothing. If these candidates are elected, and if they seriously attempt to implement any of their promises, somebody in the society is going to pay more than he should for any benefits received. The policies of something for nothing are the policies of deception. They are fraudulent.

Although God holds each person fully responsible, no agency of human government has the power to do so. This is why we must affirm as Christians that, with respect to the decisions of human governments regarding men's personal responsibility, there must always be limited liability. No agency of government is omniscient; none possesses the ability of God to read the human heart or to assess damages perfectly. We must wait for perfect justice until the day of final judgment. To insist on perfect justice from human government is to divinize that agency. It will also lead to its bankruptcy and the destruction of justice.

Consider the dangerous beast that breaks his restraining rope and kills someone. The victim's heirs sue the owner. They argue that the owner should have used a more sturdy rope. If convicted, the owner then has to prove that the rope's manufacturer was the true culprit. The court then investigates the rope manufacturer. Should he be held liable? To defend himself, he charges the hemp growers with selling a substandard product. Each stage in the case gets more technical and more expensive. The quest for perfect justice is suicidal. It increases the costs of litigation to such an extent that real victims cannot ever afford to attain restitution, for the case never ends. The courts become clogged with expensive cases that can never be resolved by anyone other than God. Only the lawyers profit. God's law does not exist in order to create employment for lawyers.

The state that attempts to impose standards of personal responsibility that imply omniscience and omnipotence will eventually make life impossible. Sometime before civilization grinds to a strangled halt, however, the bureaucrats will back down or else there will be a revolution which removes these messianic standards of personal and corporate responsibility from the law books. The price of perfect liability laws, like the price of perfect justice or the price of a risk-free society, is death. Such justice will be available only at the end of history. At that point, it will not only be available, it will be inescapable.

Whenever we speak of deterring crime, we must speak first of the deterrence of God's wrath against the community because of the courts' unwillingness to impose God's justice within the community. The civil government is required by God to seek to deter crimes because all crimes are ultimately crimes against God. An unwillingness on the part of civil magistrates to enforce God's specified sanctions against certain specified public acts calls forth God's specified covenantal cursings against the community. This threat of God's sanctions is the fourth section of God's covenant; without this covenant, either explicit or implicit, no community can exist. Only when we clearly recognize the theocentric nature of deterrence, and only when we are ready to seek to have it recognized publicly in our civil and ecclesiastical statute books, can we

legitimately begin to speak about deterring criminal behavior for the protection of the community.

The Bible does not distinguish between civil law and criminal law. All sins are crimes against God, for they break His law. All public sins must be

restrained by one or more of God's covenantal agencies of government: family, church, and State. Certain public transgressions of God's law are specified as acts to be punished by the civil magistrate. In the modern world, we call these acts crimes. The civil government enforces biblical laws against such acts. The general guideline for designating a particular public act as a crime is this: if by failing to impose sanctions against certain specified public acts, the whole community could be subsequently threatened by God's non-civil sanctions—war, plague, and famine—then the civil government becomes God's designated agency of enforcement. The civil government's primary function is to protect the community against the wrath of God by enforcing His laws against public acts that threaten the survival of the community.

The Bible encourages the legitimate division of labor in identifying all types of criminal behavior, including such acts of injustice as breaking contracts or polluting the environment. The Bible recognizes that the state is not God. It is not omniscient. The initiation of public sanctions against all criminal acts therefore must not become a monopoly of civil officers. Citizen's arrest and torts—where one person sues another in order to collect damages—are modern examples of the outworking of this biblical principle of the decentralization of law enforcement. All government begins with self-government. The bottom-up, appeals court structure of covenant society (Exodus 18) is protected by not requiring that agents of the civil government initiate all civil government's sanctions against criminal behavior. Nevertheless, all disputes into which the state can legitimately intervene and settle by judicial decision must be regarded in a biblical commonwealth as criminal behavior.

B. Violence

Victims must be compensated by perpetrators. This is the biblical principle of victim's rights. I have written a book on this: *Victim's Rights* (1990). The book is a compilation of chapters from my commentary on the case laws. By upholding the principle of victim's rights, the civil government represents everyone who resides inside its jurisdictional boundaries. Whenever the civil government performs its task on a systematic, nonarbitrary basis, this extends the division of labor. People can trust each other because they know that serious forms of deception that cause economic harm can become matters for courts to consider. Victims perceive that their interests are being defended. As a result, they have greater trust in the legitimacy of

the civil government. They are more willing to cooperate with the legal order apart from the threat of negative civil sanctions. Legitimacy is basic to the survival of civil government. If people do not impute legitimacy to the civil government, the cost of enforcing the laws will inevitably go up when people no longer use self-government to obey the laws.

The Ten Commandments are divided into two halves. Commandments one through five have to do with what we might call priestly requirements. They uphold God, God's name, God's sabbaths, and God's representatives in history: parents. Commandments six through nine have to do with kingly laws: protection against murder, protection against adultery, protection against theft, and protection against false accusations.

The tenth commandment is the only commandment that is exclusively personal: self-government only. There are no ecclesiastical or civil sanctions involved. "You must not covet your neighbor's house; you must not covet your neighbor's wife, his male servant, his female servant, his ox, his donkey, or anything that belongs to your neighbor" (Exodus 20:17). [North, *Exodus*, ch. 30] It protects marriage, and it protects private property. This reminds us that biblical government begins with self-government under God's law. He enforces the law impartially, and we should therefore be fearful if we indulge in fantasies involving successful violations of his laws. Jesus said: "For from within a person, out of the heart, proceed evil thoughts, sexual immorality, theft, murder, adultery, coveting, wickedness, deceit, sensuality, envy, slander, pride, folly. All these evils come from within, and they are what defile a person" (Mark 7:21–23).

God judges what we think. The state does not. The state has no jurisdiction over what we think. It is not omniscient. But the state has the right to impose negative sanctions on people who violate these laws: murder, adultery, theft, and slander. The biblical penalty for murder is execution. There are no exceptions. I cover the penalties for adultery in Section D. The penalty for theft is double restitution. The penalty for slander is not stated, so it would be a matter for the courts to decide. It is not a capital crime. It certainly is a crime that would impose monetary compensation to the victim.

If someone commits violence against another person, the person committing the violence would have to pay for all medical expenses. "If men fight together and hurt a pregnant woman so that she miscarries, but there is no other injury to her, then the guilty man must surely be fined as the

woman's husband demands it from him, and he must pay as the judges determine. But if there is serious injury, then you must give a life for a life, an eye for an eye, a tooth for a tooth, a hand for a hand, a foot for a foot, a burn for a burn, a wound for a wound, or a bruise for a bruise" (Exodus 21:22–25). [North, *Exodus*, ch. 37] This is the famous biblical standard of justice, *lex talionis*. It means an eye for an eye. As I have discussed in my commentary on the case laws of Exodus 21–23, this means *negotiable monetary compensation*. The victim has the right to force the court to impose an eye-for-eye penalty, but this is really the starting point for negotiation. What would the perpetrator be willing to pay to the victim in order to keep his bodily part? Probably a lot. The victim would benefit financially. If the payment were large enough, this would compensate him for his loss. Instead of seeking physical vengeance, he seeks a large settlement.

C. Fraud

Throughout this book, I have made the connection between people's actions and their legal responsibility. I have argued that the dominion covenant involves an extension of personal responsibility. It is of the essence of the dominion covenant that responsibility be extended by mankind. The increased wealth that someone attains is always accompanied by an increase in responsibility.

Fraud always has at its core the avoidance of responsibility. It is a transgression of the legal chain of responsibility between the seller's actions and the outcome of these actions. The victim of fraud finds that the seller evades responsibility for his actions. He made a sale on the basis of deliberately inaccurate information. He must therefore be capable of being held accountable in a court of law for this deception. The court reestablishes the judicial link between actions and the results of these actions. The seller who attempted to evade responsibility for his actions is tried in a court of law, and if he is convicted, he must make restitution to his victim.

It is also possible for a buyer to commit fraud. The buyer writes a check for which there is no money in the bank. The check is returned to the seller. The seller gets no money. This is fraudulent. The buyer appeared to pay with money, but he did not. This is clearly a form of theft. Another possibility is that the buyer pays with what he knows to be counterfeit money. A major advantage of digital sales by means of a credit card or other electronic payment system is this: it is almost impossible for a buyer to commit fraud.

Fraud is not a physical act. Someone has deceived another person, and the result is economic loss for the person deceived. This is an aspect of the biblical principle of weights and measures. Weights and measures, in turn, are an aspect of justice. Someone who defrauds another person by substituting false weights has stolen from that person. We call this shortchanging someone.

The victim has to be able to prove that he has suffered a loss as a result of the deception. The court cannot award a penalty payment to someone who cannot prove that he has sustained an economic loss. Most defrauded people do not bother to take someone else to court in order to get a relatively small compensation if he wins his case. His time is valuable. He may have to hire a lawyer. So, this kind of judicial action is limited to larger cases. In the United States, small claims can be adjudicated in small claims courts. But getting into the docket takes time. As with anything else, the lower the price, the more is demanded. You pay either through money or through time. Small claims are matters of payment in time, which is expensive, in order to get compensated monetarily, which is probably not worth most people's time. This is what restrains the clogging of the courts. It just is not worth the cost of time and emotional stress to pursue a case against someone who has committed fraud.

D. Counterfeiting

Counterfeiting is a specialized form of fraud. The term usually is associated with printing paper money and spending it into circulation. The person doing the printing is redistributing wealth away from trusting sellers of goods and services. Because the cost of printing is low, at least if someone can gain access to paper that is similar to the paper used by the government to produce paper money, he can extract wealth from other people. Once the plates are created, the cost of producing the bills is minimal. This leads to a redistribution of wealth based on deception. This is why counterfeiting is an extension of fraud. The statistics on counterfeiting indicate that it has a very small impact on the overall economy. In the United States, the biggest loser is the person who reports a counterfeit bill. Here is an official statement of the Department of the Treasury: "Please Note: There is no financial remuneration for the return of the counterfeit bill, but it is doing the 'right thing' to help combat counterfeiting." The government is wise enough to put the words "right thing" in quotation marks, indicating that it is the stupid thing

to do. This policy tempts the retailer who is the victim of a counterfeit bill to include the bill in his daily deposit of paper money to his local bank. The bank will then be stuck with the loss if it discovers that a bill is counterfeit.

The modern world has made a serious error. It has legalized counterfeiting by fractional reserve banks and by central banks. This is counterfeiting on a massive scale. Private counterfeiters could not do this on such a scale. Private counterfeiters are limited to printing pieces of paper. This is a small fraction of the total money supply. The bulk of the money supply is in the form of digital accounts. Here, the degree of counterfeiting is on a massive scale. The redistribution of wealth from people who trust the money to people who are legal counterfeiters is also on a massive scale. There is no other form of fraud which compares with the magnitude of the fraud of legalized counterfeiting by the banking system.

Another form of counterfeiting is counterfeiting a company's trademark or logo. The company has built up trust among a certain group of customers. It has a good reputation. The counterfeiter trades on the good reputation of the other person's name. This is a form of bearing false witness, which is prohibited by the ninth commandment. But it is also a counterfeiting violation. It is deception. It is an aspect of false weights and measures.

A buyer believes that he is purchasing a product produced by a reliable producer. The buyer is being deceived by the seller. The quality of the counterfeit product may be just as good as that offered by the original company that established its reputation, but this is a sale that will not be made by the original company. The buyer made the purchase in good faith, but he was the victim of deception. Or the product may fail to work as well as a product sold by the original producer. In either case, the seller has violated the biblical principle of honest weights and measures. A trademark or logo is an aspect of the buyer's imputation of value. So are honest weights and measures.

As in the case of fraud, counterfeiting is an attempt to break the legal connection between someone's actions and the results of those actions. When a product is counterfeit, it is difficult for a victim to identify the person who has inflicted a loss on him. He would not have made the purchase if he had known the name and reputation of the producer. Because he did not know this name, and because he was deceived into thinking that the product was produced by someone else, meaning someone with a good reputation, he is the victim of deception. He has suffered a loss. He deserves to be compensated by the person who deceived him, thereby inflicting the loss.

The free market has a system of self-policing. Retailers have an incentive to make certain that they have not been deceived by the seller of a particular good. They do not want to be made legally liable for not having done careful research into the origin of the goods that they sell to the general public. Most of the policing against counterfeiting is done by retailers. Secondarily, the sellers who have been victims of the trademark violation have an incentive to bring the violator before a court. If the jurors determine the counterfeiter is a professional, the jurors may impose such a heavy penalty on him that he will be forced to sell himself into slavery. This is not done in the modern world, but it is a biblical principle. Victims should be compensated, and perpetrators should make the payments. If perpetrators cannot afford to make the payments, then they should be sold into servitude, and the money is then used to compensate the victims. The modern world is more afraid of the accusation of imposing slavery than it is of defrauded victims. The victims are the main losers. The public, including the victims, pays for the prison system. The victims pay twice.

E. Broken Covenants and Contracts

The state has legitimate functions in the area of the enforcement of marital contracts. The state does not have exclusive rights to adjudicate such disputes. Churches have responsibilities in this area. But because there is an element of contractualism in every marital covenant, and because families are under the jurisdiction of the state, the state has legitimate rights in this area. When people marry, they do so under the legitimate authority of the state. The state is responsible for the fulfilling of some aspects of the marital covenant. This is certainly true in the case of adultery. The Mosaic law is clear with respect to adultery: it is a capital crime. "The man who commits adultery with another man's wife, that is, anyone who commits adultery with his neighbor's wife—the adulterer and the adulteress must both certainly be put to death" (Leviticus 20:10). The authority to decide what penalty to impose is possessed by the victimized husband. The primary victimized spouse is the husband of the adulterous wife. He can order both of the adulterers to be put to death. If the adulterous male is married, then his wife inherits all of his wealth. On the other hand, if the husband of the adulterous wife decides to show mercy, and the wife decides to have them both executed, they must be executed. She is the secondary victimized spouse, but she has the right to determine who lives and who dies. She

may want a divorce. She may want everything her adulterous husband owns. She may grant him life on this basis. But if she wants to get even with his consort, she can have them both executed. She is going to inherit all of his money anyway. Maybe she could negotiate with the husband of the adulterous woman. If he wants to keep her alive, then he can pay the victimized wife. All of this is subject to negotiation. Joseph showed mercy to Mary when the evidence was against her. That is the option of a spouse. But it is not a requirement.

The state has the authority to decide which children go with which parent in divorce cases. It also has the authority to decide the size of payments by husbands to divorced wives and minor children. It settles the distribution of property. It also establishes the grounds for divorce. Biblically, the grounds for divorce in the New Testament are the equivalent of covenantal infractions in the Old Testament that were capital crimes. The marriage is covenantally dead, and the victim deserves the assets of the family. A detailed study on this topic is Ray Sutton's book, *Second Chance* (1987). The state has the authority and the power to impose settlements on divorced couples who would otherwise be incapable of settling these issues on their own authority.

The state has the right to adjudicate disputed contracts. This is an aspect of the maintenance of peace. When people are involved in contractual obligations, and they cannot settle these issues, there has to be some agency with superior authority to both of the conflicting parties that is in a position to impose a settlement. On this basis, peace is restored. The conflicting parties can then get on with their lives. This extends the dominion process.

If the contracting parties agreed originally to allow the dispute to be settled by a private agency of arbitration, then the state has no authority to intervene. The state does not have an exclusive monopoly on settling disputed contracts. This principle is an extension of Paul's statement regarding the authority of churches to settle disputes between members. "When one of you has a dispute with another, does he dare to go to the civil court before an unbelieving judge, rather than before the saints? Do you not know that the believers will judge the world? If then, you will judge the world, are you not able to settle matters of little importance? Do you not know that we will judge the angels? How much more, then, can we judge matters of this life? If then you have to make judgments that pertain to daily life, why do you lay such cases as these before those who have no standing in the church? I say

this to your shame. Is there no one among you wise enough to settle a dispute between brothers? But as it stands, one believer goes to court against another believer, and that case is placed before a judge who is an unbeliever!" (I Corinthians 6:1–6) [North, *First Corinthians*, ch. 6]

F. Peace with Injustice

In disputes between people under a state's jurisdiction, courts serve as agencies of adjudication. If citizens believe that the courts will uphold justice, they will be willing to accept minor infractions by other people. But if they suspect that they really are the victims of systematic criminal activity or illegitimate behavior by others, then they may resort to violence. The primary function of the civil courts is to impose negative sanctions that are mandated by God's law.

God's law-order is designed to extend peace. Covenant-keepers are required by God to seek peace. Paul wrote the following to Timothy: "Therefore first of all, I urge that requests, prayers, intercessions, and thanksgivings be made for all people, for kings and all who are in authority, in order that we may live a peaceful and quiet life in all godliness and dignity" (I Timothy 2:1–2). [North, *First Timothy*, ch. 2] Biblical civil law is designed by God to extend peace to law-abiding people. The benefits of His laws include peace.

Peace extends the range of voluntary cooperation. This allows the extension of the division of labor, which in turn makes it possible to specialize. Specialization of production increases output. As a result, producers and consumers increase their net worth. This is why the maintenance of peace is crucial for economic prosperity.

The maintenance of peace requires civil government. A cogent presentation of this idea appears in Ludwig von Mises' third edition of *Human Action* (1966). It does not appear in the first edition, published in 1949. Mises wrote: "Peace—the absence of perpetual fighting by everyone against everyone—can be attained only by the establishment of a system in which the power to resort to violent action is monopolized by a social apparatus of compulsion and coercion and the application of this power in any individual case is regulated by a set of rules—the man-made laws as distinguished both from the laws of nature and those of praxeology [the science of human action]. The essential implement of a social system is the operation of such an apparatus commonly called government." He added this: "As far as the

government—the social apparatus of compulsion and oppression—confines the exercise of its violence and the threat of such violence to the suppression and prevention of antisocial action, there prevails what reasonably and meaningfully can be called liberty" (XV:6).

The greater the predictability of the legal system, the greater the degree of peaceful cooperation in the society, assuming that people think that the courts will defend justice. But, for day-to-day living, predictability of the courts is more important for the extension of peace and the ethical foundations of the courts. People learn to live with what they regard as minor injustice for the sake of legal predictability. They want to avoid hassle in their lives, and going to court is a hassle. It is not a zero-cost transaction. As long as the injustice is infrequent and minimal, people learn to put up with it. But if the court system is perceived by the broad mass of the population as being rigged against them, then people will begin to cheat. They will begin to cut corners judicially and ethically. This increases the cost of attaining justice, and it decreases the level of peace in society. The result is lower output per unit of resource input. In other words, the result is reduced efficiency and reduced wealth for the society at large.

Jesus preached peace rather than justice. He was preaching to victims of injustice: Hebrews living in the Roman Empire. He recommended this strategy: "You have heard that it was said, 'An eye for an eye, and a tooth for a tooth.' But I say to you, do not resist one who is evil. Instead, whoever strikes you on your right cheek, turn to him the other also. If anyone wishes to go to court with you and takes away your coat, let that person also have your cloak. Whoever compels you to go one mile, go with him two. Give to anyone who asks you, and do not turn away from anyone who wishes to borrow from you" (Matthew 5:38–42). We are to pay for peace by suffering injustice when we are victims of an unjust regime. This is the correct long-term strategy of dominion. This would be a strategy of guaranteed defeat if the world were not structured according to this standard: "He fed you in the wilderness manna that your ancestors had never known, so that he might humble you and test you, to do you good in the end, but you may say in your heart, 'My power and the might of my hand acquired all this wealth.' But you will call to mind the Lord your God, for it is he who gives you the power to get wealth; that he may establish his covenant that he swore to your fathers, as it is today" (Deuteronomy 8:16–18). [North, *Deuteronomy*, ch. 22] Because the social world is structured in terms of this principle, the long-

run effect of suffering injustice for the sake of peace is the destruction of the systems of injustice that have been established by covenant-breakers.

Conclusion

People want justice. The economist always adds this: *at some price*. People cannot get perfect justice in history. The quest for perfect justice is an expensive quest. This quest will bankrupt any society that attempts it.

People are willing to put up with minor injustices if they can attain peace. If they can pursue their lives without excessive interference, especially unpredictable interference, either from the government or from criminals, they will usually do this. But if their sense of injustice accumulates over time because of a seemingly irreversible increase of minor injustices, people will begin to change their behavior. They will no longer cooperate with the government, and in this refusal, they will find that they cannot cooperate predictably with other people. This is why an increase of injustice will eventually be reversed. The personal cost of putting up with injustice continues to escalate. At some point, there will be a tipping point. The public will cease to use self-government in their affairs. So, there is a self-destructive, self- reversing aspect of every system of injustice in the civil government's legal system that does not have ways of self-reform. It will be reformed by people outside the system: either invading armies or revolutionaries.

Tyranny has built-in limits: boundaries. This is not visible to those living in tyrannical societies, but tyrannical regimes do not survive. The social world is a created world, and God is in charge of it. He has created it in such a way that there are built-in limitations on the extension of state power. The famous 1887 statement by Lord Acton is clever: "All power corrupts, and absolute power corrupts absolutely." It was a sentence in a private letter. It is incorrect. Not all power corrupts, if by power we mean delegated authority. Also, long before political power becomes absolute, its own corruption undermines it. God has absolute power; no one else does. God is trustworthy. Absolute power does not corrupt Him. The quest for absolute power by covenant-breakers always backfires. I know of no piece of literature in the ancient world that rivals the fifth chapter of Amos in this regard. If you are ever tempted to despair about the drift of politics, read that chapter. Meanwhile, this is our command: "Instead, let justice flow like water, and righteousness like a constantly flowing stream" (Amos 5:41). Here is the biblical outcome of systematic covenant-breaking by those with power: "So the

word of the Lord will be to them command upon command, command upon command; rule upon rule, rule upon rule; here a little, there a little; so that they may go and fall backward, and be broken, ensnared, and captured" (Isaiah 28:13).

54

NATIONAL DEFENSE

When you go to war in your land against an adversary who oppresses you, then you must sound an alarm with the trumpets. I, the Lord your God, will call you to mind and save you from your enemies (Numbers 10:9).

Now Deborah, a prophetess (the wife of Lappidoth), was a leading judge in Israel at that time. She used to sit under the palm of Deborah between Ramah and Bethel in the hill country of Ephraim, and the people of Israel came to her to settle their disputes. She sent for Barak son of Abinoam from Kedesh in Naphtali. She said to him, "The Lord, the God of Israel, commands you, 'Go to Mount Tabor, and take with you ten thousand men from Naphtali and Zebulun. I will draw out Sisera, the commander of Jabin's army, to meet you by the Kishon River, with his chariots and his army, and I will give you victory over him'" (Judges 4:4–7).

On that day Deborah and Barak son of Abinoam sang this song: "When the leaders take the lead in Israel, when the people gladly volunteer for war—we praise the Lord!" (Judges 5:1–2).

Analysis

In Mosaic Israel, it was expected that the fighting men would assemble to defend the nation. According to Mosaic law, this could only be done with the public support of the priests. Numbers 10 specifies that there had to be two trumpets. In order to assemble the nation in a call to battle, the priests had to blow these two horns. In short, the decision to go to war was not a monopoly decision of civil magistrates. The ecclesiastical leaders of the nation had to approve. Their support of the war was the only way that it could be a lawful assembling of God's holy army. After the conquest under Joshua, the only form of war that was likely was defensive war. I discuss this in Section B.

In the case of Deborah's war, some of the tribes refused to send any warriors. She criticized them in her song, but that was all. There were no negative sanctions available to the national government to compel tribal leaders to send men into battle. There were also personal exemptions from battle. "The officers must speak to the people and say, 'What man is there who has built a new house and has not dedicated it? Let him go and return to his house, so that he does not die in battle and another man dedicates it. Is there anyone who has planted a vineyard and has not enjoyed its fruit? Let him go home, so he will not die in battle and another man enjoy its fruit. What man is there who is engaged to marry a woman but has not yet married her? Let him go home so that he does not die in battle and another man marries her.' The officers must speak further to the people and say, 'What man is there who is fearful or fainthearted? Let him go and return to his house, so that his brother's heart does not melt like his own heart.' When the officers have finished speaking to the people, they must appoint commanders over them" (Deuteronomy 20:5–9).[North, *Deuteronomy*, ch. 46] "When a man takes a new wife, he will not go to war with the army, neither may he be commanded to go on any forced duty; he will be free to be at home for one year and will cheer his wife whom he has taken" (Deuteronomy 24:5).

The army of Israel was not a standing army. It was a volunteer army. It was a defensive army after the conquest. It was not used to expand the borders of the nation. It was used to defend the borders of the nation. It did not usually operate outside the geographical borders of Israel.

A. Who Pays? Who Serves?

In the modern world, the nation that comes closest to the biblical model is Switzerland. It does not have a centralized government that possesses significant authority. Is a decentralized nation politically, somewhat like the tribal system of Mosaic Israel. Men are expected to serve in the military, and they train every year in the basics of national defense. The standing army is tiny. It does not operate outside of the nation's borders. There is widespread support for the military. The nation has not had to defend itself militarily since the invasion by France in 1798. The French departed in 1815 after the defeat of Napoleon. Ever since, Switzerland has maintained its neutrality and its independence.

The economic issue has to do with the taxation required to maintain a modern army. Anarcho-capitalists deny that the state should exist. They

deny that there should be any compulsion associated with national defense. There should be no taxation, no conscription, and obviously no single chain of military command. There has never been a treatise written by an anarcho-capitalist that explains how a nation could defend itself from invasion on this basis. More than any other practical question, this is the question that the anarcho-capitalists must answer. The public, including economists, will never take this position seriously until there is at least one detailed, systematic book that is grounded in economic theory and illustrated by historical examples.

In 1963, Murray Rothbard wrote an essay, "War, Peace, and the State." He opposed the state. He opposed war between states. "Any war against another State, therefore, involves the increase and extension of taxation-aggression over its own people." He concluded with these words. "A final word about conscription: of all the ways in which war aggrandizes the State, this is perhaps the most flagrant and most despotic. But the most striking fact about conscription is the absurdity of the arguments put forward on its behalf. A man must be conscripted to defend his (or someone else's?) liberty against an evil State beyond the borders. Defend his liberty? How? By being coerced into an army whose very *raison d'être* is the expunging of liberty, the trampling on all the liberties of the person, the calculated and brutal dehumanization of the soldier and his transformation into an efficient engine of murder at the whim of his 'commanding officer'? Can any conceivable foreign State do anything worse to him than what 'his' army is now doing for his alleged benefit? Who is there, O Lord, to defend him against his 'defenders?'"

In the third edition of *Human Action* (1966), Mises wrote on war and conscription. The following passage is clearly a response to Rothbard's position. Mises completely rewrote Section 6, "Freedom," in Chapter XV, "The Market." The 1949 edition did not include anything on conscription.

> But as conditions are in our age, a free nation is continually threatened by the aggressive schemes of totalitarian autocracies. If it wants to preserve its freedom, it must be prepared to defend its independence. If the government of a free country forces every citizen to cooperate fully in its designs to repel the aggressors and every able-bodied man to join the armed forces, it does not impose upon the individual a duty that would step beyond the tasks the praxeological law dictates. In a world full of unswerving

> aggressors and enslavers, integral unconditional pacifism is tantamount to unconditional surrender to the most ruthless oppressors. He who wants to remain free, must fight unto death those who are intent upon depriving him of his freedom. As isolated attempts on the part of each individual to resist are doomed to failure, the only workable way is to organize resistance by the government. The essential task of government is defense of the social system not only against domestic gangsters but also against external foes. He who in our age opposes armaments and conscription is, perhaps unbeknown to himself, an abettor of those aiming at the enslavement of all (XV:6).

The Mosaic law was not consistent with Mises' view of conscription. There was conscription, but there were legitimate exemptions. An individual who refused to serve was not regarded as an enemy of the free society. But he had to offer a reason for his refusal to fight in defense of the nation. Fear was a legitimate excuse. The Mosaic law recognized that the presence of a fearful man in a military line of battle was a liability. If he broke and ran, this might trigger a disorganized panic retreat from the front lines. It was better not to have such a person in the military. However, there is no indication that someone was exempt from the taxation required to equip the military and its defense of the nation. He was therefore not a complete free rider from the point of view of humanistic economic analysis.

The right not to be conscripted is a fundamental right, according to biblical law. The likelihood that an entire nation would not enter the armed forces is extremely low. It has never happened in history. But the right not to be forced into the armed forces is a way for the public to veto the decision of the national government to go to war. This took place in the United States during the Vietnam War, beginning in 1965 and escalating until President Nixon abolished conscription in 1973. By then, most American troops had been withdrawn from South Vietnam. But there is no comparable biblical right not to pay the taxes required to sustain the military.

Economists speak of the problem of the free rider. The free rider is an individual who benefits from the expenditures of the civil government, but refuses to contribute money, labor, or anything else to the funding of the government's program. Economists offer as their supreme example of the free rider the individual who will not contribute financially to the govern-

ment's program of military defense. They ask this: "If everyone had this right of refusal, how could the nation be defended militarily?"

With respect to conscription, biblical law is clear. Men do have this right of refusal. If there were a war in which all of the men refused to fight, or most of the men refused to fight, then the nation deserves to lose the war. Those who are willing to fight have no legal claim on those who refuse to fight. But, at the same time, if they do fight, and they win, those who refused to fight are legitimately subject to retroactive social condemnation. That is what Deborah did. She praised those who volunteered. "My heart goes out to the commanders of Israel, along with the people who gladly volunteered—we bless the Lord for them!" (Judges 5:9). She criticized those tribes that did not join in the battle against Sisera. "As for the clans of Reuben there were great searchings of heart. Gilead stayed on the other side of the Jordan; and Dan, why did he wander about on ships? Asher remained on the coast and lived close to his harbors" (Judges 5:16b–17). Even worse: "Curse Meroz!' says the angel of the Lord. 'Surely curse its inhabitants!— because they did not come to help the Lord—to help the Lord in the battle against the mighty warriors'" (v. 23).

What about citizens and residents who do not wish to pay taxes to support the military establishment? There is no biblical example of the right of refusal to pay that I am aware of. Upon reaching the age of 20, every Hebrew male had to pay half a shekel to the temple (Exodus 30:13), but this was not a tax payment imposed by the civil government. It was a payment to the priests on this basis: the man's membership in God's holy army. [North, *Exodus*, ch. 58] The civil government did have the right to number the tribes in preparation for a war (Numbers 1:1–4). [North, *Numbers*, ch. 1] Tax money would have been used to conduct this survey. The civil government did have the right to have implements of war (Judges 20:18–48). Thus, the free riders in society did not have the right to rebel against taxation merely because taxes funded the military.

B. Anti-Empire

Under the Mosaic law, the rules of war made the creation of a military empire impossible whenever these laws were obeyed by the national government. The laws of war were part of the land laws of Israel. These laws ceased with the removal of Israelites from the land during the exile. After they returned, they were always under the rule of a foreign empire.

1. Laws of Warfare

Prior to this, Deuteronomy 20 established the basic laws of warfare. "When you march up to attack a city, make those people an offer of peace. If they accept your offer and open their gates to you, all the people who are found in it must become forced labor for you and must serve you. But if it makes no offer of peace to you, but instead makes war against you, then you must besiege it, and when the Lord your God gives you victory and puts them under your control, you must kill every man in the town. But the women, the little ones, the cattle, and everything that is in the city, and all its spoil, you will take as booty for yourself. You will consume the booty of your enemies, whom the Lord your God has given to you. You must act in this way toward all the cities that are very far from you, cities that are not of the cities of these following nations" (Deuteronomy 20:10–15). [North, *Deuteronomy*, ch. 48]

First, there had to be an offer of peace. Second, if it was rejected, that was a death sentence for every adult male in the besieged nation. The Israelites would know that these men would fight to the death, since the surrender meant death anyway. This would make resistance far more fierce. The leaders of Israel would hesitate to launch such a war. Third, they would certainly have to take the women and children back with them. To leave women and children undefended in a nearby nation would be to invite the invasion of that nation by an aggressive nation on the border of the defeated nation. This would mean that Israel would be facing an expansive enemy nation on its border. To avoid this, Israel would have to expand its borders in order to occupy this now defenseless nation. Israelite males would have to bring home captive females and children. The wives back home would not be favorable toward that. Because of polygamy, the husbands would be allowed to marry these women once they were brought home as slaves (Deuteronomy 21:11). [North, *Deuteronomy*, ch. 48:D] Clearly, Hebrew wives would not be favorable to foreign wars.

Israel's theology was public as no other ancient religion's theology ever was. Foreign residents living inside Israel were invited to go to a central city every seventh year and hear the reading of the law (Deuteronomy 31:10–12). [North, *Deuteronomy*, ch. 75] Foreigners would have been in contact with their home cities, especially if they were involved in trade inside Israel. There would have been widespread international dissemination of knowledge regarding Israel's legal order.

Any foreign city that was unwise enough to goad Israel into an attack would have known in advance about Israel's rules of siege warfare. Foreign rulers would have known two things: (1) it was suicide not to surrender before a siege began; (2) it was very expensive for Israel to lay a siege, both for time lost and the costs of assimilating the captives. This system of constrained warfare would have created incentives for foreign rulers to find ways other than military invasion to get what they wanted out of Israel's rulers. Israel would be unlikely to attack a foreign city without extreme provocation, such as an invasion of Israel's territory. This fact would have tended to place a protective barrier around Israel's borders in times of its military strength, yet at the same time, Israel's military strength would not have become a major threat to foreign nations. Israel was under restrictions—military, marital, economic, and geographical-ritual—that would keep it a defensive power only. This meant that Israel's military strength would have promoted foreign trade rather than foreign wars. Israel would have been too dangerous to invade militarily, yet too restricted by the Mosaic law to invade on its own initiative. This meant that in times when Israel was mighty, these laws reduced the likelihood that Israel would engage in a systematic program of territorial conquest. It was too difficult for Israel to retain captured territory.

There is no evidence from Scripture that such foreign military campaigns were recommended by the prophets. They were legal when governed by Mosaic law, but they were not to become high-priority activities in the life of Israel. The most famous case of a tributary nation to Israel was Moab, which revolted against Israel after Ahab died. But Ahab had been more of a foreign king than an Israelite king, with his priests of rival gods. His son Jehoram was evil, although he destroyed his father's image of Baal (II Kings 3:2). When Moab revolted against him, Jehoram called the king of Judah to help him subdue Moab. When the king of Judah asked Elisha to bless the campaign, Elisha said it was only for Judah's sake that he would do so (v. 14). The campaign was initially successful, but when the king of Moab sacrificed his oldest son as a burnt offering on the wall of the city, this created indignation against Israel within the ranks of the alliance. The invading army broke up and went home (v. 27).

2. The Festivals

Without Israel's permanent occupation of foreign cities, where the real

estate could be used to support economically the women and children taken captive, Israel could not afford to engage in foreign military conquests. The requirement that adult Israelite males attend all three annual feasts placed geographical limits on the extent of the conquest. The farther away a conquered city was from Jerusalem, the more expensive the trips to the annual feasts would be for its Israelite residents.

The issue of geography posed a major problem for the Mosaic law. The festival laws would have to be reworked if the theocratic kingdom expanded; otherwise, theocratic expansion would have been impossible. How could Israelites residing in a distant city have attended the festivals every year? They couldn't. The larger the theocratic empire grew, the more impossible it would have been for all of the faithful to have walked to Jerusalem, let alone to have lodged there for a week. It seems likely that sometime after the Babylonian captivity, from which comparatively few Israelites returned to Israel, the synagogue system replaced annual attendance at Passover. The Mosaic law's festival requirements no longer were enforced rigorously on faithful men as a condition of covenantal faithfulness. There was no longer a holy army in Israel; the nation was under the administration of foreign pluralistic empires.

Before the exile, if a besieged city visibly converted to God through circumcision, would its inhabitants then have been required to march to the festivals? Only if its adult males became citizens of Israel, meaning that they became eligible to join Israel's holy army. They could not become eligible to serve as judges if they did not make these annual marches. If proselytes who lived outside the land were not part of Israel's holy army, then they were not required to attend the annual feasts. This was the case of Israelites living outside the land during and after the captivity. This meant that Israel could not create an empire through military action. Cities outside the land that converted to faith in the God of Abraham did not thereby become a part of Israel's army or of Israel's civil structure. They could not subsequently march against other cities and thereby pull national Israel into a conflict far from its original borders. These proselyte cities would pay their tithes to the Levites, but they could not legally extend Israel's authority beyond the boundaries of the land which God had promised Abraham. They could extend God's authority, but not national Israel's. The distance from the official festival city made empire impossible.

Consider Paul's absence from the feasts. He stayed in Corinth for a year and a half, teaching in the synagogue (Acts18:8–11). The author of Acts re-

cords that "we sailed away from Philippi after the days of unleavened bread, and came unto them to Troas in five days; where we abode seven days" (Acts 20:6). They had not been in Jerusalem for the Passover. They did not make it back to Jerusalem in time for the second Passover celebration for those who had been on journeys (Numbers 9:11). Paul did try to get back to Jerusalem by Pentecost (Acts 20:16). Nevertheless, in front of the Jewish assembly, Paul announced: "Brothers, I have lived before God in all good conscience until this day" (Acts 23:1b). No one called his assertion a lie on the basis of his failure to attend Passover.

Israelites were required to keep separate from gentiles. Their food laws and other laws of ritual cleanliness forced this separation. Foreign cities were not places where Israelites who kept the Mosaic law would normally want to dwell. They might retain their separate identity as a captive people who were allowed to live under their own rules and leaders in ghettos, which most of them did from the Babylonian captivity until the nineteenth century, but they could not easily rule in foreign cities without breaking the Mosaic holiness laws, let alone the far more rigorous rabbinic holiness laws. Interaction with local gentiles was too restricted. So, their empire, if any, would have to be based on a system of tribute, not local law enforcement by resident Israelites. It would have been an empire of trade and taxes. Such far-flung empires are difficult to maintain without a strong military presence. This kind of foreign military presence was made difficult by the festival laws. It took Israel's captivity outside the land to restructure the laws of the festivals. It took life in a foreign ghetto and submission to the civil laws of other gods. This restructuring was not the product of an Israelite empire; it was the product of non-Israelite empires. I use these Old Testament case laws as a way to explain why biblical law, when enforced, prevented the rise of empire.

A city in the ancient Near East, with its local gods, could become an empire only through the pluralism of idols. Israel alone could survive as a nation apart from a homeland without succumbing to pluralism, for Israel's God claimed universality and exclusivity. Such a claim negated the possibility of a common pantheon (all gods) of idols. But Israel could not become an empire because of the Mosaic laws of ritual separation; it could at most survive as a ghetto subculture in foreign lands.

The costs of maintaining an empire constantly rise as the geographical limits of the empire expand. Empires can survive for a long time. The Ro-

man empire is a good example of an empire that survived for centuries. But it came to naught at the end. Rising taxes increasingly impoverished the upper classes, and corruption at the top led to a series of assassinated emperors. The centralization of political power that every empire requires has negative effects on the domestic population. As taxes rise, productivity slows. The resources that are required to maintain the empire must come from somewhere. In the ancient world, in the initial phase of the empire, the invading troops could strip the defeated nation of assets, including the population itself. Rome established widespread slavery by means of its military conquests. But the costs of maintaining the empire always lead to the breakup of the empire. In the case of Rome, it led to the impoverishment of Roman citizens. It led to a loss of legitimacy for the central government. Citizens would no longer impute high value to their own citizenship. It meant the right to pay high taxes.

Conclusion

The development of a theocratic empire was virtually impossible for Israel under the Mosaic law. The annual festivals would have limited the geographical scope of the empire. The festivals made impossible the full-time occupation of distant foreign cities. Only after the return from Babylon, when Israel no longer was an armed holy army, could dispersion of the Israelite population take place. Evangelism by word and deed was to replace evangelism by post-war enslavement. The fact that attendance at the annual festivals was no longer enforced by excommunication after the return from Babylon is prima facie evidence that the required festivals had something to do with Israel as a holy army. Annual attendance was no longer enforced because it was no longer required. This indicates that the mandatory nature of the festivals was God's deliberate restraint on the creation of an empire. When that threat disappeared in history, so did the requirement of attendance at each of the festivals. Israel could then evangelize by word and deed. Evangelism was clearly more important than the original Mosaic requirement of annual attendance. Until Israel sheathed its sword, it could not evangelize the world.

The Mosaic law placed limits on the expansion of the national government's system of national defense. It did not eliminate the possibility of a national defense system, but it put distinct limits on this process. The most important one was the requirement that the priests support the war. But

there were military exemptions which would have reduced the size of the Army if a sufficient number of young men refused to join the call of the nation to take up arms against an enemy. The most famous of all the protesters was Barak. He refused to join Deborah's call to fight in the resistance unless she took responsibility for calling the troops to fight. "Barak said to her, 'If you go with me, I will go, but if you do not go with me, I will not go.' She said, 'I will certainly go with you. However, the road on which you are going will not lead to your honor, for the Lord will sell Sisera into the hand of a woman.' Then Deborah got up and went with Barak to Kedesh. Barak called for the men of Zebulun and Naphtali to come together at Kedesh. Ten thousand men followed him, and Deborah went along with him" (Judges 4:8–10). He refused to be conscripted except on his terms. He was willing to forgo whatever military honor there might be. He was not going to put his life at risk or anybody else's life at risk on his own authority.

Christian judicial theory teaches that there is a legitimate function for the state to conduct warfare. National defense is a legitimate taxation expenditure. But the state's authority is not unlimited. Individual males do have the right to refuse the call to serve in the armed forces. They have the right to veto such a call in their own lives. Mises was wrong when he wrote this: "He who in our age opposes armaments and conscription is, perhaps unbeknown to himself, an abettor of those aiming at the enslavement of all."

55

BUREAUCRACY AND TAXATION

When he sits on the throne of his kingdom, he must write for himself in a scroll a copy of this law, from the law that is before the priests, who are Levites. The scroll must be with him, and he must read in it all the days of his life, so that he may learn to honor the Lord his God, so as to keep all the words of this law and these statutes, to observe them. He must do this so that his heart is not lifted up above his brothers, and so that he does not turn away from the commandments, to the right hand or to the left; for the purpose that he may prolong his days in his kingdom, he and his children, among Israel (Deuteronomy 17:18–20).

So Samuel told all the words of the Lord to the people who were asking for a king. He said, "This will be the practice of the king who will reign over you. He will take your sons and appoint them to his chariots and to be his horsemen, and to run before his chariots. He will appoint for himself captains of thousands and captains of fifties. He will make some plow his ground, some reap his harvest, and some make his weapons of war and the equipment for his chariots. He will also take your daughters to be perfumers, cooks, and bakers. He will take the very best of your fields, your vineyards, and your olive orchards, and give them to his servants. He will take a tenth of your grain and of your vineyards and give to his officers and his servants" (I Samuel 8:10–15).

Analysis

Kingship was a second-best option for Mosaic Israel. For the first four centuries, there was no king in Israel, other than God. Tribal rulers governed civil affairs. They were advised by Levites and priests. This decentralized system was God's preference. But God knew that the Israelites would rebel against Him. He knew that in their hearts they were power-seekers.

So, He established laws associated with kingship. "When you have come to the land that the Lord your God gives you, and when you take possession of it and begin to live in it, and then you say, 'I will set a king over myself, like all the nations that are round about me,' then you must surely set as king over yourself someone whom the Lord your God will choose. You must set as king over yourself someone from among your brothers. You may not put a foreigner, who is not your brother, over yourself. But he must not multiply horses for himself, nor cause the people to return to Egypt so that he may multiply horses, for the Lord had said to you, 'You will never return that way again.' He must not take many wives for himself, so that his heart does not turn away. He must not accumulate large amounts of silver and gold" (Deuteronomy 17:14–17). The king had to be a covenant-keeper. He could not be a foreigner. He was not to amass horses, which were associated with cavalry and chariots. These were weapons of offense. He was not to multiply wives. If he did, they would lure him into idolatry. Finally, he was not to accumulate large amounts of gold and silver. These were capital assets that could be used to fund wars. They could also be used to expand the power of the central government over the nation. The king was to preside over a legal system based on the written laws of God. [North, *Deuteronomy*, ch. 42]

1. The Rule of Law

The Mosaic law was condensed. It was to be read publicly before the assembled nation at the end of the seventh year, meaning the sabbatical year. "Assemble the people, the men, the women, and the little ones, and your foreigner who is within your city gates, so that they may hear and learn, and so that they may honor the Lord your God and keep all the words of this law" (Deuteronomy 31:12). This is why the laws were short. They had to be capable of being read by the leaders of Israel at a festival. The basic principles of law had to be understood by everybody in the society, including resident aliens. Children had to listen. [North, *Deuteronomy*, ch. 75]

Some laws announced general principles. Others were also case laws that applied these principles. The whole nation was to learn how to apply the general laws in the case laws to specific circumstances. This meant that the people would be able to recognize deviations from the law by civil and ecclesiastical leaders. Even if they were not literate, they would understand the general principles of the law. This was a restraining factor in the lives of the people, but it was also a restraining factor in the lives of the rulers. The

people were to govern themselves, and so were the rulers. The basis of freedom and civil justice in Mosaic Israel was *self-government under God's written law.* The king was not to amass horses, wives, gold, and silver. He was to live the way that other men lived. The mark of tyranny would be a king who deviated from these restrictions.

That mark came in the kingship of Solomon. In the initial phase of his kingship, he was a righteous judge. He showed great wisdom. He was legendary for his wisdom. But then he multiplied wives for himself (I Kings 11). They led him astray theologically. His son inherited a powerful central government. He surrounded himself with power-seekers. He imposed high taxes on the people. This led to a revolt (I Kings 12). Jeroboam led the ten northern tribes out of the nation of Israel. [North, *Historical Books*, ch. 14] The northern tribes became known as Israel, and the two southern tribes became known as Judah. The nation was never again unified under an Israelite monarch. It was unified only after the Assyrian and Babylonian captivities, and the unity was provided by religiously pluralistic foreign empires.

The issue that split the kingdom was the issue of taxation. The issues of taxation, limited government, and personal liberty are always linked.

2. Taxation

It may come as a surprise to some readers, or perhaps even most readers, that the Bible never specifies the nature of legitimate taxation. It does not affirm the legitimacy of a property tax, a sales tax, or an income tax. In I Samuel 8, however, it does identify the level of taxation that God used in a doomed attempt to frighten the Israelites away from their plan to establish a king. He instructed Samuel to announce the king would impose a 10% income tax on them. This should have been sufficient to persuade them not to pursue their plans. But it did not. "But the people refused to listen to Samuel; they said, 'No! There must be a king over us so that we might be like all the other nations, and so that our king may judge us and go out before us and fight our battles'" (I Samuel 8:19–20).

There is another reference to an income tax in the Bible. In the seven fat years, Joseph collected the grain of Egypt. We are not told what percentage of the grain he collected. The text says all of it (Genesis 41:48), but that obviously is not literal. Egypt did not starve to death. At the end of the first year of the famine, the people of Egypt had sold all of their money and their livestock to Pharaoh into buy grain. They ran out of food (probably seed for

the next year's planting). They asked Joseph to buy their land in exchange for grain. He did so in the name of Pharaoh. "Then Joseph said to the people, 'See, I have bought you and your land today for Pharaoh. Now here is seed for you, and you will plant the land. At the harvest, you must give a fifth to Pharaoh, and four parts will be your own, for seed of the field and for food for your households and your children'" (Genesis 47:23–24). This was a flat rate 20% income tax. This was twice as high as the tax rate with which Samuel attempted to frighten the men of Israel. Egypt was a gigantic bureaucracy. It was the most bureaucratized nation in ancient history. It had enslaved the Israelites. It became in retrospect the model of tyranny from which God had delivered the people of Israel. The mark of that tyranny was an income tax rate of 20%. [North, *Genesis*, ch. 35]

Joseph set an example to be followed by God's people. He gave his best advice to the ruler. He administered the program that he had recommended. He saved the nation of Egypt. But this came at a price: the nation's permanent subordination to a system of sharecropping, which did not differ from income taxation. This was a form of punishment. God placed them under negative sanctions because they worshipped a false god: Pharaoh. The case of Joseph in Egypt is not a legitimate model for taxation in the modern world, except as a warning. Joseph placed covenant-breakers more firmly under a pagan king. Joseph taught them a lesson. "This is what it means to worship a false god. You will be brought under tyranny." The Egyptians did not accept the message. They consented to a later Pharaoh who made slaves of the Hebrews. They paid a heavy price prior to the exodus. The sharecropping burden of the Egyptians was twice as great a burden as that which a future Israelite king would impose on God's people.

The Mosaic law provided the foundation for civil liberty. This involved low taxes, although we are not told who collected them and what the rate of taxation was. We do know how Israel lost its unity. It began with the call for a king to represent them in warfare. They called for the creation of a military state. Under King Rehoboam, the central government imposed high taxes. That led to a revolt at the end of the kingdom. The nation drifted away from the laws governing kingship, and that led to the destruction of the kingdom.

A. Legal Predictability

I begin with the consideration of law. This is connected to the issue of taxation. It is connected in this way: the greater the level of taxation, the

greater the extension of bureaucratic rule into the lives of the people being taxed. The state is able to fund an ever-growing bureaucracy, and this bureaucracy will ultimately thwart the fundamental biblical principle of the rule of law. Essential to the principle of the rule of law is the issue of legal predictability.

In order to restrain the expansion of centralized civil government, God mandated the training of the entire nation in the principles of His law. Law was to be read publicly to all residents of Israel, even including resident aliens who did not share the theological confession of the nation. All people were required by God to govern themselves in terms of His law. They were also to make certain that their rulers did the same. This enhanced the crucial legal principle of the Mosaic law: *equality before the law*.

The law had to be simple enough for the average citizen to understand. This was crucial to the maintenance of freedom in Israel. The Levites served as teachers. The priests were a small percentage of the Levites. The Levites lived in every tribe. They did not own their own rural land on a tribal basis. They were decentralized across the nation. They were to teach the laws of the nation to the people in the years in between the reading of the law at a central location. These men had to be literate. They were specialists in the law, and they were to serve as advisers to civil magistrates. "If a matter arises that is too hard for you to judge—perhaps a question of murder or accidental death, of one person's right and another person's right, or a question of one kind of harm done, or another kind of matter, matters of controversy within your city gates—then you must go up to the place that the Lord your God will choose as his sanctuary. You must go to the priests, the descendants of Levi, and to the judge who will be serving at that time; you will seek their advice, and they will give you the verdict. You must follow the law given to you at the place the Lord will choose as his sanctuary. You will be careful to do everything that they direct you to do. Follow the law they teach you, and do according to the decisions they give you. Do not turn aside from what they tell you, to the right hand or to the left" (Deuteronomy 17:8–11). [North, *Deuteronomy*, ch. 41] It was assumed that most civil magistrates could make coherent legal decisions in cases that came before them. Only in special situations were they to seek advice from a Levite.

This is civil government *by the book*. But the book was one book. It was not a closed book. It was not a specialist's book. It was a book that is available to the masses of the population by way of the Levites. Even though

most people could not read, they could become specialists in those areas of the law that affected their businesses and activities. They had free access to a tribe of experts in the law. Levites were the lawyers of Israel. But they did not take sides. They were not hired by citizens to plead their cases. That practice came from Athenian law, not biblical law.

The predictability of the law is vital for the maintenance of freedom. Israelites knew what God required of them, and they knew what their neighbors required of them. They knew what civil judges required of them. They knew because they were trained in the law. They were not allowed to claim ignorance of the law as justification for their breaking of the law. "If anyone sins and does anything that the Lord has commanded not to be done, even if he was unaware of it, he is still guilty and must carry his own guilt" (Leviticus 5:17). [North, *Leviticus*, ch. 6] This was a strong motivation to learn the principles of the law and the case law applications of these principles. People did not want to be lawbreakers.

The law was tied to a book. The book possessed authority. The book was supposed to be the basis of court decisions. Inherently, a legal system is always past-oriented. It is based on past decisions and past written laws. This is in contrast to entrepreneurship in a profit-seeking market. Entrepreneurship must be future-oriented. Entrepreneurs try to guess what consumers will be willing and able to pay in the future. They must adjust to their assessments of what consumers will want to buy. This is completely different from what a civil judge is supposed to do. He is not to become creative in trying new things for the law to achieve. He is to become predictable, so that people will be able to judge their own liability. The more predictable his interpretation of the law becomes, the fewer the number of trials he will have to oversee. People will know in advance what the outcome of a legal confrontation is likely to be, and if they think they are going to lose in court, they will not pursue the matter. This reduces the number of cases that must be adjudicated.

B. Administrative Law

In contrast to the decentralized social and political order of Mosaic Israel is the modern administrative state. Here, extensive regulations are written by highly specialized government agencies. The employees of these departments are usually immune from being fired. They are protected by legislation. They do not respond to market forces. Their success or failure is not

based on competition in which there is open entry. They are not governed by the market's principle of high bid wins. They do not face the threat of profit and loss. That is because their salaries are guaranteed by the government.

They write detailed regulations that apply to specialized industries and businesses. There may be a dozen different bureaucracies that regulate a particular industry. There may be several dozen agencies that have this responsibility. There is no communication among them. There is no systematic resolution of conflicts in the regulations. This is rule by administrative law. The agencies are not governed directly by the separate court system that governs the rest of society. They have their own courts and procedures. They impose negative economic sanctions: fines. Around the world, administrative law is spreading. That is because the regulatory state is growing. It is a top-down system of law. It leads to a top-down system of economic planning.

This system of administrative law slowly encroaches on the decision-making of businesses. Business managers must take into consideration the detailed regulations imposed by various layers of civil government. There are national, state, and regional administrative agencies that claim jurisdiction. There are also international regulatory agencies that claim jurisdiction over foreign trade. Violations of minute regulations threaten the profitability of businesses. The threat of negative sanctions imposed by an administrative agency becomes as great a threat as the negative sanctions of consumers in refusing to purchase the output of the business. This fear of negative sanctions imposed by regulatory agencies reshapes the business process. Business managers become less responsive to consumer demand.

This development is taking place all over the world. It is hostile to the Western legal tradition. Harold Berman was a historian of Western law at Harvard University. In 1983, Harvard University Press published his book, *Law and Revolution: The Formation of the Western Legal Tradition*. It was a specialized monograph on the origin of this tradition, which he dated with the papal legal revolution that began in 1076. In the "Introduction," he presented an analysis of the conflict between the rise of administrative law and the Western legal tradition. I regard this as one of the most important academic analyses that I have ever read.

He used strong rhetoric, which is not common to academic monographs. He wrote this: "That the Western legal tradition, like Western civilization as a whole, is undergoing in the twentieth century a crisis greater than it has ever known before is not something that can be proved scientifically. It is

something that is known, ultimately, by intuition" (p. 33). Here is the problem. "The law is becoming more fragmented, more subjective, geared more to expediency and less to morality, concerned more with immediate consequences and less with consistency or continuity. Thus the historical soil of the Western legal tradition is being washed away in the twentieth century, and the tradition itself is threatened with collapse" (p. 39). He went on.

> The breakdown of the Western legal tradition springs only in part from the socialist revolutions that were inaugurated in Russia in October 1917 and that have gradually spread throughout the West (and throughout other parts of the world as well), albeit often in relatively mild forms. It springs only in part from massive state intervention in the economy of the nation (the welfare state), and only in part from the massive bureaucratization of social and economic life through a huge centralized corporate entities (the corporate state). It springs much more from the crisis of Western civilization itself, commencing in 1914 with the outbreak of World War I. This was more than an economic and technological revolution, more even than a political revolution. . . . But the disintegration of the very foundation of that tradition cannot be accommodated; and the greatest challenge to those foundations is the massive loss of confidence in the West itself, as a civilization, a community, and in the legal tradition which for nine centuries has helped to sustain it (pp. 39–40).

This analysis leads to the issue of bureaucracy and bureaucratization.

C. Bureaucracy

Bureaucracy is one form of management. It is associated with civil government. The other form of management is profit management. It is associated with business. The two systems are not the same. They are not the same because the funding of the two systems is different. The bureaucrat is guaranteed his funding by the state. Nothing guarantees the income of the businessman.

1. Mises on Bureaucracy

There is an inherent conflict between bureaucratic management and

profit management. This was the insight of Ludwig von Mises in his short book, *Bureaucracy* (1944). Bureaucratic management is appropriate to the management of state agencies. Profit management is appropriate for business. They are structured differently. The key to understanding these differences is the source of the funding.

Bureaucratic management is funded by the state. Politicians write laws. They create agency jurisdictions. Then agency bureaucrats enforce the written laws, as they interpret these laws. Their jurisdiction is delegated by politicians. They are required by law to stay within these jurisdictions. To enable them to do this, administrative agencies write complex rules governing these operations. The government then funds these operations. Budgets are written in advance. The agencies are required by law to stay within their budgets. They are allowed to spend only what has been authorized by politicians. In this way politicians attempt to make sure that the government's budget does not suffer unpredicted overruns. Without detailed laws, the agencies would become more arbitrary than they already are. Thus, *bureaucratic management is past-oriented*. It is geared to the original legislation. It follows administrative rule books. It must stay within a budget passed by politicians in the previous fiscal year.

In contrast is profit management. The immediate source of the funding is financial reserves accumulated by the business through after-tax profits, or borrowed, or gained through the sale of shares of ownership. These expenditures must be validated by the decisions of customers to buy the output of the firm at the prices set by senior managers. If customers fail to do this, the company suffers losses. If this continues, it will go out of business. To make profits, the companies must cover costs of operations, plus gain a residual. The residual is entrepreneurial profit. It comes from paying less to deliver the goods than customers pay. The firms "buy low and sell high." How do they do this? By spotting opportunities that their competitors did not spot. They bought production goods at a low price because their competitors did not bid up the prices. This process rests on forecasting. Thus, *profit-management is future-oriented*.

The mindset that produces entrepreneurial success is different from the mindset that produces bureaucratic success. The first is future-oriented. The second is past-oriented. The first thrives on uncertainty. The second thrives on predictability. The first deals with the constantly changing world of customer demand. The second deals with the relatively unchanging world

of legal precedents. The first management system is governed by this rule: "make a profit." The second is governed by this rule: "don't make a mistake." The first requires only general rules. The second requires detailed descriptions of violations that can be in the thousands of pages.

By extending their control over entrepreneurs, lawyers in government agencies threaten entrepreneurs with the negative sanctions of the law. Entrepreneurs must pay attention to these negative sanctions. They shift their focus from satisfying future customers to satisfying future government lawyers. State regulation pressures entrepreneurs to become more bureaucratic and less entrepreneurial. This reduces the economic authority of customers and increases the economic authority of lawyers who work for the government, or who work for businesses to protect them from lawyers who work for the government.

Here is an example from American government practice that is universal. I was on Congressman Ron Paul's staff in the second half of 1976: his first term. I read this story in the *Washington Star*. It went out of business in 1981. I may have read this sometime between July 1976 to August 1977, when I moved to North Carolina. An editor sent a reporter to interview a woman who was retiring. She had worked for the same agency for at least four decades. She was thought to be the bureaucrat with the longest tenure in Washington, D.C., so she was considered newsworthy. The reporter asked her what the secret of her career success was. She was candid. She told him that she always said "no" to any request by a member of the public. The reporter asked her why. I paraphrase: "When I said 'no,' I could later retreat to 'yes,' and the person was happy. If I said 'yes,' and I have to retreat to 'no,' the person was unhappy. He might cause trouble. He might complain to my superior."

In business, a commissioned salesman profits only when there is a sale. His initial impulse therefore is to say "yes" in order to get the order. If the customer asks, "Can I get this in blue?" the salesman asks: "Do you want it in blue?" If the shopper says "yes," the salesman assures him that he can get it in blue. He gets him to sign the contract. Then he calls the home office to make sure there are blue units in stock. The company may not be able to deliver what was promised on schedule, but the salesman will take time to persuade the buyer to wait a little longer or else accept the item in yellow. His attitude is different from the attitude of a bureaucrat. He wants to cooperate with the public. This difference stems from the difference in institutional funding: the state or the market.

Bureaucratic management is inherently top-down management. It is management done by the book. *It is past-oriented because the authoritative law book and the bureaucratic rule book were written in the past.* The system is supposed to be predictable. When the state is small, and when its regulatory apparatus is minimal, bureaucratic management is reasonably predictable. But with the rise of the administrative state, and with the expansion of civil government into most areas of life, the complexity of the rule books and the thickness of the rule books destroy the predictability of the system. Tenured bureaucrats within a particular administrative agency have great authority that is expensive to challenge. A negative sanction must first be challenged by the citizen in the agency's independent administrative law court. Only after this court has affirmed the decision of the agency, which is almost automatic, is the penalized business allowed to appeal to the nation's independent judiciary with its own system of courts. By that time, the business may have been bankrupted by the decision of the administrative law court.

Mises was not opposed to bureaucracy. He said that bureaucratic management is basic to the state. In order to control the state, politicians must place limits on bureaucrats. This is why there must be rule books. Bureaucrats must be predictable. If they were not predictable, they would be arbitrary. The problem is this, which Mises did not mention: *the bureaucrats write the rule books.* Then they interpret the rule books in their own system of independent courts. Then they apply negative sanctions on their own authority. That is the problem with the administrative state.

Mises wrote this about bureaucracy.

> . . . bureaucracy in itself is neither good nor bad. It is a method of management which can be applied in different spheres of human activity. There is a field, namely, the handling of the apparatus of government, in which bureaucratic methods are required by necessity. What many people nowadays consider an evil is not bureaucracy as such, but the expansion of the sphere in which bureaucratic management is applied. This expansion is the unavoidable consequence of the progressive restriction of the individual citizen's freedom, of the inherent trend of present-day economic and social policies toward the substitution of government control for private initiative. People blame bureaucracy, but what they re-

> ally have in mind are the endeavors to make the state socialist and totalitarian. . . . What characterizes our time is the expansion of the sphere of government interference with business and with many other items of the citizenry's affairs. And this results in a substitution of bureaucratic management for profit management (p. 44).

Mises believed in the legitimacy of the state. Society needs the state. "Remove the law, and society will be destroyed by anarchy. The State is the only institution entitled to apply coercion and compulsion and to inflict harm upon individuals. This tremendous power cannot be abandoned to the discretion of some men, however competent and clever they may deem themselves. It is necessary to restrict its application. This is the task of the laws" (p. 76).

I want to make something clear at this point. *Mises taught that the free market is not an autonomous institution*. It is under civil law. The civil government is not bound by the principle of the free market, namely, high monetary bid wins. Civil government has a legitimate monopoly of violence. He was opposed to anarcho-capitalism. Specifically, he was opposed to the views of the state held by his disciple, Murray Rothbard. He wrote in the third edition of *Human Action*: "The maintenance of a government apparatus of courts, police officers, prisons, and of armed forces requires considerable expenditure. To levy taxes for these purposes is fully compatible with the freedom the individual enjoys in a free market economy" (Section 6).

2. Weber on Bureaucracy

Max Weber and Mises were friends. Weber published Mises' famous 1920 article, "Economic Calculation in the Socialist Commonwealth," in the scholarly journal he edited. He died before the article was published, but he read it, and he approved of it.

Weber was convinced that bureaucratization is the wave of the future. He did not make the distinction between profit management and bureaucratic management. He lumped them together as a comprehensive social process. Analytically, this was a mistake. He wrote this in 1909. "Take as the tip of the pyramid the authoritarian powers of the state or the municipality within a monarchical state system. That will remind you vividly of the system of the old Egyptians in antiquity, which was saturated, from top

to bottom, by the spirit of the 'little job.' To this day, there has never been a bureaucracy that could have come even close to Egyptian bureaucracy. This is absolutely clear to anyone familiar with Egyptian administrative history and it is just as utterly clear that today we are rushing inexorably towards a development that follows precisely this model, albeit on a different basis: on a technically refined, more rationalized, i.e., on a far more mechanized basis."

This march towards bureaucratization is in the private sector as well as the public sector. "Imagine the consequences of the kind of extensive bureaucratization and nationalization that we can already see looming ahead. Already today in the private companies of big industry as well as each and every economic enterprise organized along modern lines, the submission to computation—that sort of rational calculation—is extending all the way down to the lowest level. It turns every single worker into a small cog in this machine and increasingly prepares him or her to feel that way psychologically and to only ask whether it is possible to go from being a small cog to a bigger one." He could have used the assembly line production techniques of the Ford Motor Company as an example.

He dreaded the advent of a bureaucratic society that is run like a great machine: a bureaucratic cage. I wrote about this in a graduate school paper for Robert Nisbet in 1969. I published it in 1976 in the book I edited, *Foundations of Christian Scholarship* (1976). Weber was a Kantian. He recognized the dualism between Kant's scientific phenomenal realm of impersonal cause and effect and his irrational/nonrational noumenal realm of freedom. He saw the extension of modern bureaucracy as the march of Kant's phenomenal realm. Weber believed that bureaucracy would eventually overcome the liberty associated with capitalism. I quoted this from his posthumously published *Economy and Society*. "It is very likely that the bureaucratization of society will one day subdue capitalism just as it did in antiquity. Then the 'anarchy of production' will be replaced by that 'order' which, in a very singular way, characterized in the late Roman Empire and, even more, the new Kingdom and the rule of the Ptolemies in Egypt" (cited by Guenther Roth, "Preface," p. LII).

His analysis of bureaucracy applies well to mass production factory techniques, but it does not apply well to service industries. Service industries are the source of most of the Western world's wealth today. In advanced economies, manufacturing accounts for a declining percentage of

the total productivity. Profitability comes from innovation, and innovation is not bureaucratic. It is not generated predictably according to administrative rules. Whenever the state is kept small, and regulatory agencies are sparsely funded, bureaucratization is not the wave of the future. Human creativity has always been the basis of innovation and profitability. To make a profit, it requires creativity, insight, and the ability to look into the future accurately. The free market is not predictable for a reason: consumers have the right to change their minds. They are free to choose.

D. Free to Choose

The key difference between the two models is the difference of finance. The question that we must always ask in assigning a task to either is this: "How does it receive its operating funds?" If this is not asked in advance, there will inevitably be a system which will not do its job efficiently.

The profit management system operates on an open market that permits the entrance of competitive forms. Whatever profits a firm makes or losses it sustains will be determined by its ability to satisfy consumer demand. Assuming that it stays within the framework of law established by the state, the only question that it must ask is whether or not its income exceeds its expenditures. The free market permits profit-seeking firms to fail if they do not meet the demands of the buying public. Thus, the top level of any bureaucracy has a guide to the performance of the lower levels, especially those levels connected with sales. Are they producing profits or losses? Every management system must be hierarchical. The crucial differentiating factor is the set of guidelines used by top level managers to evaluate the performance of lower-level managers.

Senior management delegates to the lower levels considerable responsibility and therefore an extensive flexibility. The lower levels are expected to know the conditions of local supply and demand—the particular markets—far better than bureaucrats at the top level can possibly know them. Thus, there is an integration of knowledge. The top level assigns the general goals: products needed, aggregate estimates of expenditures and possible profits, the prospective operation of the company as a whole. Lower levels try to fulfill their basic responsibility, namely, to turn a profit. If they do turn a profit, they are left alone by the upper levels. If they fail, they must inform the upper levels of any corrections needed at the top. Otherwise, they may be replaced. *The profit-management system possesses greater flexibility than*

the statist form because it is subject to the possibility of losses. Its revenues are dependent upon its success or failure on the market.

The statist bureaucracy operates under a totally different system of financing. Its expenses are met by the state. Therefore, the responsibility of the managers of this bureaucracy is to see to it that all the income received is spent only on those items budgeted in advance when the operating budget was originally drawn up and approved by the state. The statist bureaucracy has fixed budgets and is not subjected to the competition of an open market. Thus, we find the top level of the hierarchy concerned with the disbursal of the appropriated funds. Is the money going to the proper subordinate level? Is it being spent as previously approved? Is all of the money accounted for on the proper forms? By the very nature of the structure, there can be very little flexibility permitted to the lower levels. Upper levels must see that all goes according to the previously approved plan: "the book." The task of the upper level is supervisory, not in the sense of evaluating profit and loss, but supervisory in the sense of control. The premium is placed on accurate reporting of control data; the goal is total predictability. This is inherent in the very nature of the statist bureaucracy. It has to be, as Mises pointed out. The politicians want to be certain that their appropriations are being spent as legislated. The bureaucrat should not be free to choose. The bureaucrat should administer the law according to the written rules and court precedents. If the bureaucrat is free to choose, then he possesses arbitrary power. Here is the problem: *the more complex the rules are, the greater the autonomy of a bureaucrat to interpret them*. He becomes arbitrary. When he does, those under his jurisdiction are at risk of losing their freedom. Here is the rule: *the more that a bureaucrat is free to choose, the less that citizens are free to choose*.

There is only one way to reform a bureaucracy that is out of control. Politicians must reduce the funding of the bureaucracy. Politicians should not expect to be able to monitor every bureaucracy's actual performance. There are too many bureaucracies to manage. So, there can only be general guidelines. If politicians, because of pressure from voters, decide that there must be a reform of the bureaucracy, this can only be done by a dramatic reduction of the funding of the bureaucracies.

This raises the issue of taxation. If the state cannot collect enough money from taxpayers to fund a growing number of bureaucratic agencies, this will assist politicians in the reform of specific bureaucracies. In fact, there is

no way for the politicians to achieve this goal other than dramatic tax cutting. Politicians who continue to spend increasing amounts of money through taxation and borrowing are inescapably and inevitably expanding the domain of the administrative law state. They are reducing freedom.

I argue that, from the beginning, the Mosaic law so restricted the power of the central government, especially the king, that only by violating biblical law could a king become so powerful that he could imitate Egypt in the creation of top-down bureaucratic agencies.

E. The Tithe Principle

I have said that there is no explicit statement of the Bible about what constitutes legitimate taxation. There is a statement of what constitutes illegitimate taxation: a tax on income as high as 10%. Why is this the standard question? Because God is entitled to 10%. To argue that the state is entitled to 10% is to argue that the state has a greater claim on ownership than God does. It is, in short, to claim that the state is divine.

In the modern world, no major nation-state collects less than 10% of the total productivity of the nation. This has come about since the beginning of World War I in 1914. Prior to this time, no state had the right to collect taxes as high as 10% of income. Samuel warned the Israelites that the king would collect 10% of their output. Today, that would not be a warning. That would be a near-utopian political campaign slogan for the establishment of limited government.

The principle of the tithe establishes a moral principle. The rich should not pay a higher rate of taxation than the poor. No member of any church would consent to a compulsory program of donation that required him to pay a higher percentage than some other member of the congregation. The church would immediately lose members with high incomes. They would transfer their membership to churches that did not demand that they pay a higher percentage of their income. This is an aspect of the biblical principle of the rule of law. Here is that rule as it applies to civil government. "Do not cause judgment to be false. You must not show favoritism to someone because he is poor, and you must not show favoritism to someone because he is important. Instead, judge your neighbor righteously" (Leviticus 19:15). [North, *Leviticus*, ch. 14] The modern welfare state is a violation of this principle. This is why the modern welfare state is anti-biblical. It is popular throughout the world, but this is a testimony of the rebellion of the modern

world against the God of the Bible and the moral principles that this God has set forth in the Bible.

There can be other taxes. A sales tax is a flat tax that is imposed on the retail price of an item. So is a value-added tax. In principle, so is a property tax. But there are lots of exemptions on these taxes. The exemptions favor certain individuals or certain businesses. Exceptions are a violation of the principle of the rule of law.

The expansion of the modern state which began in August 1914 has led to the modern welfare state. The promises made by politicians to voters regarding government-funded retirement programs and government-funded old age healthcare programs have created unfunded liabilities for the modern welfare state that are beyond the capability of these welfare states to fulfill. Voters have believed the promises. They have adjusted their lifestyles to these promises. They have become emotionally dependent on the fulfillment of these promises. As they reach retirement age, most of them become heavily dependent on the income provided by the nation-state. Statistically, the promises cannot be fulfilled. This will create a crisis for every welfare state. This will be a crisis of legitimacy. This will be the judgment of God against the universal violation of His fundamental judicial principle: the rule of law. The modern welfare state is built on a revision of the eighth commandment: "You shall not steal, except by majority vote."

Conclusion

A fundamental biblical principle of law is this: it must be predictable. This means that the public should know what to expect from the legal order. The legal order should not be so complex that a typical citizen is unable to understand the limits which he must place on himself, and also the limits which society should place on the state and its agents. The growing complexity of modern law is such that the law is not predictable, especially administrative law, which is written, interpreted, and enforced by the agencies, not by independent courts. This system of law exists throughout the West. Administrative law is inherently a violation of biblical principle. It is leading to the erosion of personal freedom around the world.

Bureaucracy is inescapable. This was the conclusion of Mises in 1944. Bureaucracy is supposed to be limited. It is supposed to be limited by minimal funding from the government, and it is supposed to be limited by the specific terms of the laws that are enforced by executive bureaucracies. But

the multiplication of laws has led to a multiplication of administrative procedures. Today, no one understands what is required of him. There are too many bureaucratic agencies producing written regulations, and these regulations can be interpreted only by skilled lawyers. The average citizen cannot afford to hire a skilled lawyer. Neither can the average business. So, the bureaucrats are restrained only by the budgets of their agencies. There is no serious monitoring by the parliaments and legislatures of what the agencies do with this money. Legislatures have abandoned their responsibility to make certain that all of the money they allocate to administrative agencies is spent as the legislature intended.

Administrative agencies must be funded by taxes. Taxes are much higher than what the prophet Samuel identified as tyrannical taxation by future kings of Israel. Furthermore, governments can borrow money when tax revenues do not equal government expenditures. This increases the amount of money available to administrative agencies to enforce their regulations.

The level of political promises with respect to old age retirement benefits is so great today that there is no way that the promises can be fulfilled. When the governments begin to enact legislative loopholes for the government, thereby cutting off income to retired citizens, this will create a political crisis. The issue here is the maintenance of legitimacy. If the government defaults on its promises, it will not be able to maintain its legitimacy. This is a threat to every national government in the West.

To restore biblical civil government, citizens must restore the limits of the Mosaic law placed on civil government. The laws must be easily understood. They must be enforced uniformly on all citizens. The multiplication of laws has led to the multiplication of regulations, and these must be eliminated. If they are maintained, we will not see the restoration of biblical civil government.

The only sure way to change bureaucracies is to cut their funding. This should be done as a matter of principle. This will require that the civil governments of the world not have the authority to raise taxes above the threshold of the tithe: 10% of net income. When civil governments impose taxes greater than the tithe, they are implicitly announcing that they have greater authority than God. This is inherently satanic. Thus, the restoration of biblical civil government must begin with a drastic reduction in taxes. Until this is done, covenant-keepers will live in a world governed by covenant-breakers. If covenant-keepers vote on the side of covenant-breakers to maintain

the existing tyrannical level of taxation, they will be as the residents of Egypt during the pharaohs of the oppression. The difference is this: they will not cry out to God for deliverance (Exodus 3:9).

56

BOUNDARY VIOLATIONS

If a man grazes his livestock in a field or vineyard and lets his animal loose, and it grazes in another man's field, he must make restitution from the best of his own field and from the best of his own vineyard. If a fire breaks out and spreads in thorns so that stacked grain, or standing grain, or a field is consumed, the one who started the fire must surely make restitution (Exodus 22:5–6).

The Lord spoke to Moses and to Aaron, saying, "When anyone has on the skin of his body a swelling or scab or a bright spot, and it becomes infected and there is a skin disease in his body, then he must be brought to Aaron the high priest, or to one of his sons the priests. Then the priest will examine the disease in the skin of his body. . . . The priest will examine him to see if the rash has spread farther in the skin. If it has spread, then the priest must pronounce him unclean. It is an infectious disease' (Leviticus 13:1–3a, 8).

Analysis

We see in these passages the unmistakable truth: civil government has responsibilities in the area of boundaries. In the case of the animal that strays across the property boundary to a neighbor's property, or in the case of a fire which spreads across a property boundary into a neighbor's property, there must be restitution paid to the neighbor. The state has a responsibility to assess what this restitution is, and then to make certain that the owner of the invasive animal or fire pays this restitution to the victim. This principle is the basis of pollution control laws, as we shall see.

Then there is the issue of an infectious disease. The disease described as leprosy in Leviticus was a judicial disease. It is not the same disease as Hansen's disease. Therefore, the priests made the determination as to whether the disease had become infectious. When the priests made this determination, they declared that an infectious house had to be knocked down. They

also declared that an infectious person had to be placed under quarantine. The state had to enforce these decisions. The laws associated with quarantine for leprosy constitute the longest passage in the Old Testament regarding a specific law: two chapters.

A. Fire Control

Because fire spreads across legal boundaries, the state has a legitimate role in containing the spread of fire. Fire is comparable to an invading army. It places property and lives at risk. It does not honor borders. Societies throughout history have recognized this function of the state. One of the universal services provided by the state is fire control. These are usually provided on a local basis. Cities and counties establish fire departments.

Fire spreads through sparks thrown off by combustible materials. Containing a fire requires that firemen reduce the spread of the fire to combustible materials. This means that fire departments spray water and fire-retarding chemicals on private property. This is usually a benefit to the owners of the property. Their property is less likely to be destroyed by the oncoming fire. Both political theory and legal theory recognize that this benefit must be paid for. The person who refuses to pay in advance for protection from fire is a beneficiary, once a fire breaks out. He is what economists call a free rider. His home is going to be protected by the fire department as part of a fire-abatement plan. If he can legally avoid paying for this service, he may choose to do so. In a community in which individual property owners are not required to pay for fire protection, the total community will spend less on fire protection then it should spend, given the risk of the destructive power of fire. So, both political theory and legal theory agree on the legitimacy of imposing compulsory taxes and fire codes on communities. In this way, individuals who live in communities are able to gain greater protection from fire than would be the case if fire protection were left to the free market.

There is another aspect of fire abatement that is not widely discussed in economics textbooks. This is the authority of the fire department to destroy property that is likely to be burned up after a fire has begun. The fire department does this in order to contain the fire. If the fire department determines that a house or a group of houses in the neighborhood will be reached by the fire, and, by knocking down the buildings, the fire department can restrain the spread of the fire, the department will knock down the buildings. Courts have determined that fire departments are not legally liable for

the losses imposed by this process. This strategy of fire abatement is not much used in the modern world, but it has been in the past. The assumption is that the buildings would have been consumed by the fire anyway, but by knocking down the buildings, the state may restrict the spread of the fire. The fire would have imposed the loss, so the state determines in advance that it is not responsible for the losses imposed by knocking down the structures. The thinking is this: if the fire department hesitates for fear of losses associated with knocking down the property, the fire may spread to the rest of the community. A better solution to this from the point of view of liberty is to require either the fire department or the local government to purchase insurance that would cover such violations of property rights.

Fire codes that restrict the construction of facilities in advance are comparable to safety regulations of all kinds. The biblical judicial principle is that owners of property are legally responsible for injuries to non-owners who are invited into these properties. For example, someone who invites guests onto a flat roof that can be used for entertaining people are responsible for building a barrier around the edges of the roof. This is the judicial principle of strict liability. I discuss this in my comments on Deuteronomy 22:8, which appear in Chapter 54 of *Inheritance and Dominion*: "The Rooftop Railing law." The same legal principle applies to barriers around pits into which children or animals may fall into. Owners are held legally responsible by the courts for injury or even death. In order to protect themselves against court decisions against them, they are told to provide protective barriers. I discuss this in my comments on Exodus 21:33–34: "The Uncovered Pit." This appears in Chapter 41 of *Authority and Dominion*. But retroactive strict liability is not the same as a building code that prohibits the construction of facilities. Owners are not told in advance that they must provide the barriers; they are merely warned in advance that, if they do not provide the barriers, and somebody is injured, they will be held legally responsible. By extension, fire codes governing the protection of non-owners inside a building can legitimately announce in advance which kinds of liability will be imposed on property owners if damages result because of the absence of the protective measures. But the state is not given the authority to restrict the construction of such facilities.

B. Pollution Control

In Volume 3 of *Authority and Dominion*, Chapter 44 is devoted to pol-

lution, ownership, and responsibility. It is a long chapter: 69 pages. In that chapter, I discussed 34 different economic issues that are associated with the question of pollution. I do not summarize all of them here. I mention the first five as examples: (1) how to assess true costs and benefits, (2) overusing "free" resources, (3) private property vs. disputes, (4) fire as pollution, (5) damage and restitution. There are many more examples.

I begin here with the case of the wandering animal. It wanders from its property and invades another man's field. It eats grain. The owner of the beast owes the victimized neighbor the equivalent of whatever has been destroyed. He must not short-change the victim; he must pay from the best of his field. The legal principle is that the injured party is entitled to the replacement of his damaged goods by the best of the responsible party's possessions. What is the theocentric principle that this legal principle reflects? This: God, in imposing an appropriate restitution payment from rebellious mankind, is entitled to the best that man has to offer. This is why no one was allowed under the Mosaic law to bring to God's sacrificial altar any injured or blemished animal (Leviticus 1:10).

1. Victim's Rights

We see here an application of the general biblical judicial principle of victim's rights. The owner is presumed to have the best information about his own property. He is therefore responsible for his property. This is the biblical principle that links private ownership with personal responsibility. This is the great advantage of the free market in comparison with all other systems of property management. What we have here is a boundary violation. The owner should have restrained his beast. Maybe he should have used a rope. Maybe he should have put up a fence. But it is his beast, and he is responsible for it.

The judicial issue is boundaries. There must be an agency of adjudication that settles matters of boundary violations between private owners. That agency is civil government. No society can operate without such an agency. There must be judges who have the authority to declare who is responsible. The society must have executive institutions related to the police function in order to make certain that the guilty party pays restitution to the innocent party.

As the Mosaic law says, the same principle applies to the kindling of a fire. If a fire gets out of control and destroys another person's property, the

person who started the fire is responsible. This is why the old legal principle, developed early in the extension of railroads, was correct. The railroads are responsible for fires that the sparks from the smokestacks started. This is why the most influential of all economics articles, R. H. Coase's "The Problem of Social Cost" (1960), is categorically wrong economically, judicially, and morally. He said that the railroad is not automatically liable. The judges must determine must who is responsible. If they decide (how?) that it is better for society to have greater output of crops, then the railroad company is responsible. On the other hand, if the judges determine (how?) that the social value of the transportation by rail is greater than the social value of the crops, then the railroad company owns the farmer nothing. This perspective is an explicit violation of biblical law. I wrote a book about this: *The Coase Theorem* (1992). I wrote a long appendix on this in *Authority and Dominion*: "The Problem of Social Cost." You can consult either document.

2. Moving Fluids

The fundamental problem with pollution, from an economic analysis point of view, is this: fluids do not respect private property boundaries. There are two types of fluids: liquids and gases. Both of them can pollute a neighbor's property and his health. Factories can discharge pollutants into moving streams. This imposes costs on people who live downstream. They are victims of the pollution. Similarly, factories can pollute the atmosphere through smokestacks. The victims need to be compensated. But how?

The problem is this: the cost of trying each case in a court is usually excessive from the point of view of the victims. A victim cannot claim exactly so much money in terms of damages. Furthermore, the courts would get clogged with endless disputes regarding polluted water. This is even more true with respect to air pollution. The major pollution device in the second half of the twentieth century was the automobile. The internal combustion engine produces polluting gases. There was no way to identify which polluting vehicle was the cause. There was no way for victims who breathed polluted air to identify which vehicle was responsible. So, the only way for the state to reduce the level of pollution, in response to the demands of voters, was to require emission controls on internal combustion engines. These rules in principle are biblical.

At some point, new technologies will reduce the level of automobile emissions. There is great hope that cars will soon be electric. But then the

question will arise regarding the source of the power to generate electricity. Is it coal? Is it oil? Is it solar? Is it nuclear? No one knows at this point. Someday, people will know. Then this will not be a major issue.

If the state can identify a particular source of pollution, it can create negative sanctions to reduce this pollution. Economists debate regarding the most cost-effective form of sanctions. These are technical questions which are and not issues of economic theory. What is an issue of economic theory is this: without the state to determine the proper level of pollution, in response to voters standards, there will be excessive pollution. Victims will not be able to defend themselves. Victims may be tempted in some cases to resort to violence against a polluter if the state does not first intervene. This would not be true in the case of violence against automobile owners or buses, but it certainly might be the case with factories that spew pollutants into the atmosphere.

The fundamental economic issue of moving fluids is this: no one owns them. In the case of automobile pollution, there is no way to assess damages or for victims to collect restitution. Therefore, there has to be regulatory intervention to prevent the violence before it happens. This is a matter of property rights. The problem is this: with moving fluids, establishing property rights, thereby establishing responsibility, is difficult in the case of decentralized sources.

A major source of regional water pollution is urine excreted by cattle. There is no single source of the pollution. The pollution is carried by underground water sources into rivers and lakes. This is a legitimate technical issue. The state must intervene in order to administer a technical solution that is acceptable to the general public. The property rights of cattlemen need to be honored to some extent, but the property rights of victims of polluted water need to be settled. This settlement cannot be done on the basis of the free-market principle of high bid wins. It certainly should not be settled on the basis of high bid wins among judges, because that is the issue of bribery.

3. Zero Pollution

The question of pollution, ultimately, is a question of stewardship, meaning personal responsibility. The Bible affirms that each man is responsible for his actions. No man is to pass along the costs of his activities to his neighbor, apart from the latter's consent. Where there is ownership (legitimate delegated sovereignty), there must also be responsibility.

Perfect justice in this regard is impossible, and any attempt to create a completely pollution-free environment is doomed to failure. Furthermore, it is not possible to assess the full costs of pollution, since estimating costs necessarily requires men to make interpersonal comparisons of subjective utility, and such comparisons can be made only imperfectly. Arbitrary estimates must be made by judges, arbitration committees, or administrative bureaucracies in charge of pollution-control programs. These will not be "scientific" estimates, for such measurable estimates cannot be made in economics. Perfection here cannot be achieved at any cost.

Citizens must use self-discipline in their quest for a better world. If every citizen is forever suing his neighbor for each perceived infringement on his environmental lifestyle, society will perish. This is the great danger of class-action suits by one person in the name of an unspecified number of others in a supposed "class" of victims. Each person can sue a company, which may be operating within the law, thereby imposing endless legal fees on the firm. This could tie up a firm's legitimate operations. Such suits could be brought by anyone for almost any perceived infraction: automobile safety, national defense, and on and on. Those who bring class-action suits that are determined by a jury to constitute unwarranted harassment of a business must be put at risk for their actions. Everyone must become responsible for his actions, not just producers.

Ours is not a perfect world, and any attempt to impose perfect standards on it, without acknowledging the limits imposed by scarcity, and therefore the costs involved, is demonic. The whole community will be harmed. Any civil government that attempts to reduce pollution to anywhere near zero is messianic. The results of a quest for zero pollution will be similar to the results of a quest for perfect justice: bankruptcy of the treasury, bankruptcy of producers, judicial arbitrariness, and an increasing number of economic disruptions.

4. Future-orientation

The question of resource conservation is intimately tied to the question of time perspective. When we ask ourselves questions concerning resource conservation, we are asking questions regarding conservation for future consumption. The debate over ecology has been dominated by people who believe (or say they believe) that the civil government has the most responsible view of the future. They do not raise the obvious question:

"What motivates the individuals who control the various agencies of civil government?"

Free market economists stress the long-range motivations of those who own property. When a person sells an asset, he is capitalizing in the present the expected future net productivity of that asset. The individual who can sell an asset owns it. The government bureaucrat cannot legally sell it and pocket the money, so he does not own it. Thus, his motivation is to use the asset in such a way that his income or prestige is increased. He is not paid to represent future generations of users. In contrast, a private owner is paid to represent those living in the future, for an asset's present price depends heavily on the expected stream of net income it will generate over time.

This is why ownership is important in allocating pollution. Long-term regulation by the government is always a threat to efficient management. There has to be clear-cut evidence that one man's use of his own property causes physical damage to a neighbor's property. This was what the Bible made clear in its twin laws against unrestrained beasts and unrestrained fire.

C. Public Health

I used the example of the Mosaic law governing the disease called leprosy. As in the case of pollution, this is an issue of boundaries. In this case, germs, viruses, and other forms of invisible creatures cross boundaries. They can inflict enormous damage on large numbers of people. It is not possible to prevent the damage from spreading without quarantining people or else eliminating the microscopic infectious carriers of sickness and death.

This is a technical question. It involves science, and there are disputes among scientists regarding cause-and-effect. Nevertheless, judges have to come to some kind of decision. So do politicians. The laws of quarantine are as old as civilization. People recognized early that other people were sources of sickness. The question is how to separate these sick people from the general society. If this is not possible, then the question arises: "How can the government kill the bugs that carry the diseases?" Either the state quarantines the human carrier or it kills the bugs that the sick person carries.

1. Insect Abatement

The most obvious example of killing the bugs in the twentieth century was the use of the chemical known as DDT. It killed mosquitoes. More than

any other bugs in history, mosquitoes have been the great enemies of mankind. They carry smaller bugs that can make people sick or kill them. DDT was the greatest enemy of mosquitoes in history. It was outlawed in the final third of the century, and the results were devastating in certain regions. Because of a book written by an amateur scientist, Rachel Carson, *Silent Spring* (1962), the ecology movement was able to persuade dozens of nations to ban the use of DDT, beginning in 1972. Western governments pressured foreign governments to ban DDT on pain of losing trade deals with the West. In 2017, Dr Paul Offit described what happened next. "In India, between 1952 and 1962, DDT caused a decrease in annual malaria cases from 100 million to 60,000. By the late 1970s, no longer able to use DDT, the number of cases increased to 6 million. In Sri Lanka, before the use of DDT, 2.8 million people suffered from malaria. When the spraying stopped, only 17 people suffered from the disease. Then, no longer able to use DDT, Sri Lanka suffered a massive malaria epidemic: 1.5 million people were infected by the parasite."

Who should pay for mosquito abatement programs? Individuals cannot mobilize the whole community, one by one. It takes something analogous to military mobilization to eliminate mosquitoes. Without DDT, this is even more difficult. Around the world, all societies that are at war with mosquitoes have adopted government-funded mosquito abatement programs. Usually, these are funded locally. This is reasonable because mosquito infestations are not uniform. Certain regions suffer from pollution more than others. Therefore, the residents in those regions should pay the bulk of the expenses in developing and implementing local mosquito abatement programs.

Public health programs require a systematic use of chemical spraying to kill a sufficient number of disease-carrying insects. These programs have to be well organized. They really are the equivalent of military defense programs. Both in terms of economic theory and scientific strategies, they must be run the way a military hierarchy is run: top-down.

2. Quarantine

The idea of quarantine in the 13th chapter of Leviticus is based on the need to protect the public. The spread of the disease was to be halted by removing the afflicted individual from within the city. The concern was public health, but it was not a concern about biological contagion. It was

concern about the willingness of God to afflict other individuals with the disease or other afflictions because of their unwillingness to enforce His law. Thus, the quarantining process of Leviticus 13 was primarily judicial. In fact, it would probably be safe to say that it was entirely judicial. Only by the extension of the principle of public protection within the city is it legitimate to classify today's diseases as being subject legally to the Bible's quarantining process.

Does this qualification alter the legal status of the civil government? For example, does this mean that in modern times the civil government is required to finance an individual who has been quarantined? The state has brought sanctions against him in the name of the health of the community. This was also the case in Mosaic Israel. The state has put him under quarantine because he is biologically contagious. This was not the case in the Mosaic Israel. Does the shift from judicial affliction to biological affliction change the legal requirements of the civil government? Does the change from the contagious legal status of the individual to his contagious biological status change the requirements of the civil government? In other words, do the quarantine laws of the civil government go through a fundamental transformation between the Old Covenant and the New Covenant?

It is part of Anglo-American common law that when a city is on fire, the authorities have the right to knock down an individual's house in order to stop the spread of the fire. It is also part of common law that the city and the community do not owe anything to the individual who has had his house knocked down in this way. It is presumed that the fire would have destroyed the house anyway. It is also assumed that by destroying the individual's house, other houses within the community will be protected. This law was for generations basic to the protection of cities. If the fire-fighters had to worry about the cost of repayment each time they knocked down a house, it is unlikely that they would have had the same kind of incentive to knock down the houses. If the price of an action goes up, less of it will be demanded. In this case, it means that the city would have been less likely to be protected from the "plague" of fire because of legal obligations to repay those people who were unfortunate enough to be caught in the line of fire, and whose houses, if knocked down, would have allowed the creation of a fire break. It was assumed that the safety of the city was of greater importance than the loss to the individual. Because the house probably would have burned down anyway, it really was not a net loss to the owner.

Consider a contemporary individual who has contracted a contagious disease. He has become a threat to the community. If the community is required by law to finance this individual until such time as he recovers biologically from the disease, it is less likely that the community will take the necessary steps to isolate him. Common law therefore does not require the civil government to compensate the quarantined individual. Neither does biblical law. This is why quarantine is a devastating event in the life of the individual. Historically, quarantined people have not been permitted to leave their homes. Others have not been able to come into those homes without falling under the ban. While it is assumed that charity will be forthcoming to help the quarantined individual in his time of need, it has been assumed until very recently that the state has no legal obligation to support that person economically during the period of his confinement. To do so would raise the cost of confining individuals, and it would therefore lead to an unwillingness on the part of public health officials to confine them. This would increase the risk of contagion and disease in the community.

Because there was no command in the Old Testament that the state support quarantined individuals, it is not possible to derive from this law any biblical injunction for state welfare programs. The only legitimate conclusion to draw from this law by analogy is that there is no legitimate state welfare function. The job of the civil government is to protect people from violence, not support people who have been afflicted, either naturally or judicially. To argue any other way is to make the state into an agency of healing rather than an agency of protection. The state is an agency that is supposed to bring negative sanctions against evil-doers. There is no biblical warrant for the concept of the state as a healer. The job of the state is to prohibit behavior that threatens other individuals physically. If this threatening behavior is breathing upon others, then the state must see to it that the individuals who are a threat to others are not put into close contact with those who might be injured as a result.

The victim of leprosy during the Mosaic Covenant was forced out of his home by the state, and was made to wander outside the city. The state was not responsible for his financial support. Conclusion: the case for modern socialized medicine cannot be based on any biblical text. It must be based on the argument from silence. It must be based on the conclusion that there has been a fundamental change in the function of civil government in the New Testament: from protector (Old Covenant) to healer. We have yet to

see the exegetical case for such a change. While the presuppositions of the modern political order favor such a view of the state—as did the presuppositions of the ancient pagan world—humanist presuppositions are not a valid substitute for biblical exegesis.

Conclusion

Civil government has responsibilities in the area of adjudicating disputes across boundaries of private property. But when these disputes cannot be settled because of moving fluids, the civil government must step in and establish regulatory standards that will reduce the degree to which of victims of pollution are damaged. The quest for a pollution-free world is messianic, but communities can decide politically if certain forms of pollution are unacceptable to them. This is a matter for local civil government.

There has to be a system of government regulation, up to and including quarantine, in order to stop the spread of dangerous pathogens. These should be regarded as invaders. If a society has the right to create a military defense system against invading armies, then it has the right to do the same with respect to invading armies of pathogens. Only the civil government can do this. This cannot be done on a profit-seeking basis. This is not a matter for the free market to solve. The free market can solve certain issues, such as the development of anti-pathogen chemicals or techniques. There can be profit in this. But the taxpayer is going to have to provide the money that civil governments use to develop systematic pathogen defense strategies, and then implement these strategies.

In terms of the total cost of government, these are minor expenditures. Societies have used them throughout history. Most people accept them. There is no well-organized opposition to their use. Compared to the massive expenditures of the modern state on projects that are clearly banned by the Bible, these exceptions do not constitute a threat to the freedom of covenant- keeping people. Furthermore, those free market economists who would deny any of these expenditures have not developed comprehensive monographs on how the free market could attain these goals. They are legitimate goals. Free-market economists need to come to grips with this fact: they cannot beat something with nothing.

57

PUBLIC UTILITIES

So the men got up and went. Joshua commanded those who went to write the description of the land, saying, "Go up and down in the land and write a description of it and return to me. I will cast lots for you here before the Lord at Shiloh." The men left and walked up and down in the land and wrote a description of it in a scroll by its cities in seven sections, listing the cities in each section. Then they returned to Joshua in the camp at Shiloh. Then Joshua cast lots for them at Shiloh before the Lord. It was there that Joshua assigned the land to the people of Israel, and to each was given his portion of the land (Joshua 18:8–10).

Analysis

After seven years of fighting for control over the promised land of Canaan, Israel had attained military victory. At that time, Joshua called the tribes together. He began the allocation of the spoils of war. The spoils of war included all of the rural land, the cities, and the road system that connected the cities.

Joshua was the nation's supreme military leader. He was therefore also the supreme judge of the nation. He was the commander-in-chief. The victory of Israel meant that everything that had been constructed by the Canaanites became the property of the state of Israel. As the civil leader of the state of Israel, Joshua appointed men to survey the property that belonged to the state. He had the lawful authority to do this as the leader of the state. The allocation of the property was by lot within the tribal system. The land, cities, and roads were transferred to the tribal governments and to the families whose men had participated in the military conquest of the land.

God was the owner of the land. He had transferred ownership to Abraham. The covenantal heirs of Abraham had now taken possession of the land by means of organized violence. This violence was mandated by God. God had told them that this violence was to be total. Moses said to the con-

quest generation: "In the cities of these peoples that the Lord your God is giving you as an inheritance, you must save alive nothing that breathes. Instead, you must completely destroy them: the Hittite, and the Amorite, the Canaanite, the Perizzite, the Hivite, and the Jebusite, as the Lord your God has commanded you. Do this so that they do not teach you to act in any of their abominable ways, as they have done with their gods. If you do, you will sin against the Lord your God" (Deuteronomy 20:16–18). God made it clear that this was to be annihilation. [North, *Deuteronomy*, ch. 48:B] Israelite citizens were not to offer to purchase the land of the Canaanites. This had to be conquest by war. Military conquest for territory was not again required of the Israelites, but this time it was required. All of the Canaanites' wealth that survived the war was to become the inheritance of the people of Israel. This had been God's promise to Abraham from the beginning. "I will give to you, and to your descendants after you, the land where you have been living, all the land of Canaan, for an everlasting possession, and I will be their God" (Genesis 17:8).

The land was then transferred to tribes, then to clans, then to specific families (Numbers 26:52–56). [North, *Numbers*, ch. 14] It was not distributed on the basis of the free market's principle of allocation: high bid wins. The legal basis of inheritance was participation in the war of conquest. Moses specifically said this to the tribes that wanted to inherit the land across the Jordan River. They could not inherit if they did not participate in the war alongside the other tribes. "So Moses replied to them, 'If you do what you say, if you arm yourselves to go before the Lord to war, then every one of your armed men must cross over the Jordan before the Lord, until he has driven out his enemies from before him and the land is subdued before him. Then afterward you may return. You will be guiltless toward the Lord and toward Israel. This land will be your possession before the Lord. But if you do not do so, look, you will have sinned against the Lord. Be sure that your sin will find you out. Build cities for your families and pens for your sheep; then do what you have said'" (Numbers 32:20–24).

A. Establishing Original Ownership of Land

God expelled Adam and Eve from the garden. He placed a flaming sword at the entrance so that they could not eat from the tree of life (Genesis 3:22). [North, *Genesis*, ch. 13] He used violence against them. First, he killed them definitively. Second, He was gracious to provide animal skins for them, but

then He threw them out into the cold, cruel world. Third, he excluded them by means of force. This established the principle: in the world after the fall, property rights are to be enforced by the threat of violence. Violence is legal in the defense of property. Property is grounded in violence. It was grounded in voluntary exchange before the fall, but not after. When discussing property rights, all roads lead back to violence. Any theory of property that grounds the rights of post-fall ownership on anything else except violence is not biblical. God told Adam that he would die if he transgressed the boundary of the forbidden tree (Genesis 2:17). [North, *Genesis*, ch. 9]

The free market's principle of establishing legal title is to trace title back to the original owner. But there is a technical problem with this technique: the original owner was the state. At some point, the state, through its military, conquered the previous owners. This means that legal title is always grounded in state violence. It is not grounded in voluntary exchange.

By what legal right did the state gain ownership? Victory on the battlefield. *Might made right.* This is universally true in matters of the ownership of land. Economists may offer detailed theories of voluntary exchange-based ownership today, but they cannot find evidence of their theories when it comes to the original establishment of ownership. This is why economists avoid the topic of the original ownership of land. They always end up at a war. Original ownership was established in history by state violence. When there is valuable land available, and the land is occupied sparsely or by nomadic tribes, an invading military force will conquer the nearly empty land. The victorious state will then exterminate the original holders, or drive them out of the land, or assimilate them on whatever legal basis the victorious nation allows.

This is not conjectural history. This is the history of every known nation. It can be documented. In most cases, nations then adopt a grand theory of the legitimacy of the original conquest of the land. The new immigrants are said to have been entitled to conquer the land because they had moral superiority. Maybe they did, but this is open to debate. What they had for certain was better military tactics and probably superior weapons. They also had greater population because of immigration. There were more of them. This is not how the textbooks of the nation are usually written, but this is what the documentation always reveals. This at least was true until the final third of the twentieth century. In the United States, textbooks began criticizing Christopher Columbus and the other invaders of the West-

ern hemisphere. The general public pays no attention to these arguments. The textbook writers do not discuss how the existing tribes and peoples in the Western hemisphere attained their ownership of the land. There are no historical records, but there are always legends, and the legends always point to a military leader who was in direct contact with the gods of the now-occupying culture.

In the Western liberal tradition, the most popular theory of original ownership was established by John Locke in 1690. In his *Second Treatise on Government*, he devoted Chapter V of Book II to a consideration of original ownership. He argued that God gave all of the earth as grant to all mankind. This did not settle the issue of which family owned which piece of property. "Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own person: this no body has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state nature hath placed it in, it hath by this labour something annexed to it, that excludes the common right of other men: for this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good, left in common for others" (II:V:27).

This is a classic example of conjectural history. It begins with a hypothetical state of nature. We know nothing of this hypothetical realm. It is history without documentation or any possibility of obtaining documentation. It is, as I have called such theories, a just-so story. It is history as some logician has concluded it should have been, whether or not it really was. We are supposed to accept it, not on the basis of historical documentation, but simply because it sounds logical. But this story is not remotely logical. How much land does a man's labor entitle him to? Enough to support his family under prevailing technological practices? Enough to support the biological heirs of his family? Locke did not say. We also do not know how much labor entitles an individual to how much land. We do not know about his efficiency. The more efficient he was, presumably the less land he needed. That penalizes the efficient producer. It subsidizes the inefficient producer.

At the heart of property rights is boundaries. There is no way to identify the physical boundaries of ownership based on Locke's theory of origi-

nal ownership. The only way that somebody could defend his property was by violence. He had to insist that his labor entitled him to a particular plot of land. Then he had to defend it physically. There would always be some other would-be farmer or would-be speculator who wanted ownership of this land. He could threaten violence. He did not have to pay any attention to the original person's claim. The original owner might be able to get the civil government to defend his title, but then we are back to violence. Violence is the basis of ownership. A would-be owner can spin all the wonderful theories he wants about his moral right to the property, but if he cannot defend it through violence, he is not going to retain ownership.

There is no libertarian theory of original ownership that acknowledges violence as the heart of the matter both legally and practically. Amazingly, some defenders of a zero-state world invoke Locke, as if Locke's theory were coherent. In his book, *The Economics and Ethics of Private Property* (1993), libertarian anarcho-capitalist economist Hans-Hermann Hoppe adopted Locke's argument as the basis of private property. "As soon as scarce resources are visibly appropriated—as soon as somebody 'mixes his labor' with them, as John Locke phrased it, and there are objective traces of this—then property (the right of exclusive control), can only be acquired by a contractual transfer of property titles from a previous to a later owner, and any attempt to unilaterally limit this exclusive control of previous owners or any unsolicited transformation of the physical characteristics of the scarce means in question is, in strict analogy with aggressions against other people's bodies, an unjustifiable action."

Tracing title back to original owners always leads to a military conquest. There may not be a written traceable title all the way back, but in principle this is how today's title is grounded judicially. This is not a just-so story. This is how nations have allocated state-owned land. They sold the land or gave it away to specific individuals or groups. States have the right to do this because they own the land. They gained title fair and square: through violence. Tracing such title transfers are possible in nations that are recent in origin. They can be traced back at least three centuries in most of the United States. With respect to land acquired by military action after the ratification of the Constitution in 1788, surveys and titles are a matter of public record. The United States government sold land to settlers. It transferred land to territories, and when territories became states, states took over the records. The United States government did not consult with

Indian tribes regarding the transfer of most of this land. The Indians could not defend title on the battlefield, so they lost the land to the United States government. Throughout history, this is the story of land ownership. It was surely the story of Israel in the days of Joshua.

When it comes to land, the state is the original owner. It established ownership through military conquest. National governments have transferred title to specific plots of land on numerous legal bases. Even after the transfer, civil governments have always retained a veto over the ways in which the land can be used.

B. Roads Are Judicial

Roads are primarily judicial. They are only secondarily economic. There must always be a way for agents of the civil government to access the residences and business facilities owned by individuals and corporations. Roads enable civil government to enforce the law at a low cost. Every society has roads, and every society's roads are controlled by civil governments. Roads are inherent in the nature of civil government. There may be toll roads that are privately owned, but they have been authorized by civil governments, and they are subjected to taxes by civil governments. The idea of autonomous roads is not biblical. It is also not historical. The state always retains a veto power over the uses to which roads will be put. It does not matter who bids the highest price.

We can see this in the use of roads in Mosaic Israel. We begin with the cities of refuge.

> Then the Lord said to Joshua, "Speak to the people of Israel, saying, 'Appoint the cities of refuge of which I spoke to you by the hand of Moses. Do this so that one who unintentionally kills a person can go there. These cities will be a place of refuge from anyone who seeks to avenge the blood of a person who was killed. He will run to one of those cities and will stand at the entrance of the city gate, and explain his case to the elders of that city. Then they will take him into the city and give him a place for him to live among them. If one of them comes to try to avenge the blood of the person who was killed, then the people of the city must not hand the one who killed him over to the authorities. They must not do this because he killed his neighbor unintentionally, and he had no hatred to-

> ward him in the past. He must stay in that city until he has stood before the assembly for judgment, until the death of the one who was serving as high priest in those days. Then the one who had accidentally killed the person may return to his own town and his own home, to the town from which he fled'" (Joshua 20:1–6).

The Mosaic law required roads that would enable people to get to one of the six cities of refuge. There were three additional cities in the land beyond the Jordan (Deuteronomy 4:41). These cities were judicial, which meant that everyone had access to them.

In order for a township or city to gain access to a city of refuge, it would have to create a road or use an existing Canaanite-built road. There also had to be some way to get to the central city where the temple was built. That would create the need for other roads. Mosaic Israel was covered with roads. These were judicial roads. By judicial, I mean both the civil covenant and the ecclesiastical covenant.

In order for a tribe to get access to the cities of refuge and also to Jerusalem, they would have had to cooperate with other tribes. They would have had to have roads to connect to whatever roads were available to the other tribes. There would have been an entire network of roads across Israel. All of these roads would have been funded either by direct taxation or by some sort of state-enforced system of required work on the roads. The roads had to be kept cleared. This was a judicial matter.

This means that Israel had a system of eminent domain. Eminent domain allows municipalities and other regional governments to confiscate private land. In order to avoid theft, the confiscating agency has to pay a market price to the owner of the land. But the owner of the land does not have the right to stop the state from expanding its ownership of land. This is because the state is the original owner. It delegates ownership to individuals, but only on its terms.

What about bridges? The state should be allowed to construct bridges in order to enable people residing in distant areas to gain access to the court. There is no doubt that politicians could bend the meaning of the law in order to build roads and bridges for economic reasons. But the only biblical reason is this one: an individual has the right to gain access to justice.

The reason why eminent domain is required is this. The economic value of the plots of land needed in the final stages of construction of a road would

get increasingly valuable. This is a result of the doctrine of sunk costs. All of the money invested in building the road is a sunk cost. It is of little economic value if the road is not completed. This would mean that the marginal value of each of the plots of land in the final stretch of the road would rise in value equal to the total economic value expected from the road. Each property owner on the map leading to the judicial city would be able to demand an ever-higher price. This would make the price of building a road astronomical. The solution is eminent domain. The state pays every property owner whatever the market price of the land was prior to the announcement of the road.

Murray Rothbard tried to get around this obvious problem by using an analogy that did not directly deal with eminent domain. In *Man, Economy, and State* (1962), he used the analogy of eggs in a recipe. "For example, it is erroneous to argue as follows: Eggs are the good in question. It is possible that a man needs four eggs to bake a cake. In that case, the second egg may be used for a less urgent use than the first egg, and the third egg for a less urgent use than the second. However, since the fourth egg allows a cake to be produced that would not otherwise be available, the marginal utility of the fourth egg is greater than that of the third egg." This is analytically correct. This is the central issue in eminent domain. But he never mentioned eminent domain. He got around this problem by defining it away. "This argument neglects the fact that a 'good' is not the physical material, but any material whatever of which the units will constitute an equally serviceable supply. Since the fourth egg is not equally serviceable and interchangeable with the first egg, the two eggs are not units of the same supply, and therefore the law of marginal utility does not apply to this case at all. To treat eggs in this case as homogeneous units of one good, it would be necessary to consider each set of four eggs as a unit" (Chap. 1, Appendix A). With eminent domain by the state, the plots of land are purchased as a unit. But if these were market transactions, purchased one at a time, the price of the final plots would become prohibitively expensive. The road could not be built. He did not discuss eminent domain in this book, a glaring omission. He did mention it briefly in *Power and Market* (1970), the original publisher's suppressed section of *Man, Economy, and State*. But he did not discuss the central analytical issue: the rising marginal value of the plots of land remaining to be purchased along the proposed the roadway. I think it is significant that Mises did not mention eminent domain in *Human Action*.

George Reisman, Mises' former pupil, did discuss eminent domain in his massive treatise, *Capitalism* (1990). He did not mention the problem of the rising marginal value of the final plots. More significantly, he accepted the legitimacy of eminent domain for pipelines and roads. The government "should restrict the role of eminent domain to its traditional sphere in the United States, which is precisely such projects as road construction, in which a vast stretch of property is required for an indivisible use" (10:8). This was a practical consideration. He did not discuss the moral and economic theory of ownership lying behind this conclusion.

There is a potential for minor corruption with eminent domain. Someone who knew where the road was going to be built could go out and buy up property along the route. Then the value of his property would rise, and he would profit when the state paid him a free market price for his land. If he sold this information to somebody, he could profit. He would not have to buy the property himself. The point is this: the price paid would have to be based on the market value of the land prior to the development of the project. Only the state could force the sale. If there were no eminent domain, the building of judicial roads would be economically impossible or close to it.

Eminent domain that is used for non-state ventures, where the government buys non-judicially related land and then sells it to real estate developers, is clearly a violation of property rights. This should be prohibited by law.

C. Funding the Roads

If access to roads is free of charge, then taxes fund the roads. In the case of toll roads, individuals who use the roads fund the roads. But the purchase of the land that is used by the toll roads was always enabled by the civil government. The civil government may tax the profits of the toll roads. In some cases, it may sell for a cash payment the right of a private company to collect tolls.

As the cost of digital monitoring gets lower, it is likely that more roads will be converted to toll roads. Only those people who use the roads will be charged. The ability of the owners of the roads to assess the charges and collect them will get cheaper over time, which means that there will be greater use of these tools of toll collection.

One way for a local community to be paid the by users of roads is to sell the right to install water and sewer pipe lines. Another way would be for cities to sell the right to install telephone cables. It is not necessary that the

city pay for building these utilities. The city will always retain control over the quality of the services and the prices charged. These are public utilities. Public utilities need access to homes and businesses. But, at the same time, homes and businesses need access to public utilities.

For any city to develop, there must be a way to bring in water and to remove sewage. The city of Rome today still uses sewage-removal tunnels that were built five centuries before the birth of Christ. Sewers had been constructed at least two centuries earlier. Without aqueducts and sewers, Rome would never have become a city of a million people in the days of Christ.

Railroads are the economic equivalent of roads. They began to spread after 1830. Governments could build them, but profit-seeking companies were the main builders. They can only build where the government had set aside land for the tracks. After 1844, telegraph wires usually were built alongside of railroad tracks. The telegraph became a major public utility.

With the development of electrical power in the late nineteenth century, the generation and distribution of electricity became another public utility that was basic for the expansion of the city and the rise in per capita income. Then came telephones.

No city larger than a township has ever developed without public roads and the public utilities associated with roads. The division of labor has always centered in cities, and cities have always used public utilities as a way to expand their populations.

There is no libertarian economic theory of urban development that rests solely on the principle of private ownership in the distribution principle of high bid wins. This is second only to a theory of national defense as a gaping hole in libertarian theory. There should be competing libertarian monographs on this topic. There has yet to be a single monograph on this topic.

D. Urbanization

The Bible begins with the story of Adam in the garden. It ends with a description of the New Heaven and the New Earth. There is a common link between the two places of residence: the tree of life. "Out of the ground the Lord God made every tree to grow that is pleasant to the sight and good for food. This included the tree of life that was in the midst of the garden, and the tree of the knowledge of good and evil" (Genesis 2:9). [North, *Genesis*, ch. 3:C] "Then the angel showed me the river of the water of life, clear as crystal. It was flowing from the throne of God and of the Lamb through the

middle of the city's street. On each side of the river was the tree of life, bearing twelve kinds of fruits, and it bears its fruit every month. The leaves of the tree are for the healing of the nations" (Revelation 22:1–2).

The Bible presents human history as the development of cities. There is the city of God, and there are the various cities of man. This was the great theme of Augustine in *The City of God* in the aftermath of the sacking of Rome by the Visigoths in A.D. 410. There is a linear development from the garden to the city. Adam and Eve were removed from the garden in order to keep them away from the tree of life (Genesis 3:23). Throughout the early chapters of the Old Testament we read of the creation of cities. The movement of people in rural areas to cities has been the movement of all of history. This accelerated after the advent of compound economic growth sometime around 1800. It accelerated again two centuries later in China and India. The rate of urbanization has never been higher. But without public utilities and roads, there would not be urbanization.

There is no libertarian theory of urbanization. The market's principle of high monetary bid wins is inapplicable in some areas of urban development. This includes roads. This is because roads are judicial. But what about public utilities such as water delivery, sewage disposal and telephone lines? These are not judicial. There is a connection between judicial roads and economic services that parallel roads. The civil government cannot allow constant digging up of roadway to allow multiple providers of economic services. The disruption of the roadways would be constant. So, in order to provide stability, governments regulate prices of monopolistic service providers. The state or the local government grants a right of way to these companies as a way to fund the maintenance of the roads. That is what the fees should be used for, biblically speaking. Public utilities make possible a growing city, and this brings more people under the authority of local government. This is an aspect of the move from garden to city. Plots of land along the roadways have lawns, flowers, and other marks of a garden.

Historically, a nation with a developed transportation system is capable of defending itself against invasion. This includes extensive roads, but these days, it also includes railroads.

Conclusion

Certain crucial services are not available without the intervention of the state. National defense is one of them. The police power is another. This

also includes roads. All three of these institutional arrangements are an extension of the principle of civil government. It is not possible to design a system of final sanctions that is allocated by the free-market principle of high bid wins. The Bible actually prohibits this in the case of courts. The principle of high bid wins is the basis of bribery, which is prohibited.

Economists rarely discuss the theoretical foundations of public utilities. These foundations rest heavily on a theory of roads. The roads are judicial, not primarily economic. They have economic value, but only because they initially are based on the rule of law. The roads are extensions of civil government in the same way that courts are extensions of civil government. Roads are necessary for people to gain access to the courts. They are also necessary for the executive to enforce the judgments of the courts. Roads are two-way, not simply in the sense of geographical direction, but in the sense of judicial administration.

Roads enable the civil government to extend its jurisdiction into the lives of citizens. Roads reduce the cost of gaining access to the courts, and they reduce the cost of enforcing the decisions of the courts. An economic rule takes over: as the price falls, more is demanded. In order to extend the principle of justice across the nation or any geographical region, it is imperative that civil governments create a roadway system. Joshua and the Israelites simply took over the road system that had been built by the civil governments of the Canaanites. Then they established a new system of law. That was what the conquest was all about.

Public utilities are byproducts of the state's system of roads. They provide the services necessary for immigrants from farms to take up residence in cities. As I have said already, the biblical historical model is the transition from the garden to the city. This is how the dominion covenant is extended in history.

There is no libertarian theory of roads because roads are not governed by the principle of high bid wins. The distribution of land associated with the building of a road cannot come about through the operation of the market process. That is because of the increasing market value of the land that remains to be purchased in order to extend the road. The state can buy the required land from all of the participants at a flat rate. This is not possible for a profit-seeking enterprise.

CONCLUSION TO PART 6

> *If there is a dispute between men and they go to court, and the judges judge them, then they will acquit the righteous and condemn the wicked. If the guilty man deserves to be beaten, then the judge will make him lie down and be beaten in his presence with the ordered number of blows, as was his crime. The judge may give him forty blows, but he may not exceed that number; for if he should exceed that number and beat him with many more blows, then your fellow Israelite would be humiliated before your eyes (Deuteronomy 25:1–3).*

This passage makes it clear that God authorizes the state to impose violence on convicted criminals and rebels. Modern political theory insists that this violence is monopolistic. The Bible does not teach this. The blood avenger had the right of violence against someone who he suspected of murder, even when that person killed someone else by accident. It is not legal for someone to defend himself against a blood avenger. He had to be swift of foot to legally evade the blood avenger. The Mosaic law set up the cities of refuge as a way to mitigate and undermine the power of the blood avenger. Therefore, families do have some biblical authority to impose violence, but in New Testament times this is obviously limited. There are no more blood avengers. Jesus Christ fulfilled the office of the blood avenger, who was also the kinsman redeemer. Christ in final judgment will complete that office. This is why it is imperative that Christ the kinsman-redeemer defend you against Christ the blood avenger.

The Bible is clear on the legitimacy of civil government. I did my best to make this clear in the introduction to this section. I then devoted three chapters to topics related to the legitimate activities of the state. These are justice, national defense, bureaucracy and taxation, and issues related to the topic of eminent domain.

I covered public utilities. These include water systems, sewage systems, and electrical power. These make urban societies possible. These make large

concentrations of population possible. Cities have existed for as long as we have historical records. Rome had an amazing system of aqueducts which made possible a city of a million people in the days of Jesus Christ. But Rome was a centralized government. It was increasingly tyrannical. The aqueducts made this possible. Is centralization what the government should do with our tax money? I have not seen any detailed monograph on this topic. I am not ready to write one today. It would be an exercise in utopianism. The cities exist, and they are growing. They are dependent on public utilities. The best that we can say for them is that the regulators will trade off political pressures from voters and the desire for profit by directors of public utilities. Compared with all of the other problems that confront the modern world, the theoretical and practical issues associated with public utilities are minimal. They are not a large portion of the household budgets of the middle class, who have a majority of votes.

I have dealt with topics in this chapter in which it is clear that the Bible authorizes the activities of civil governments. I have made it clear that the Bible testifies against the idea that civil government is illegitimate. Civil government does have legitimate functions. These functions make possible the social order, which makes possible the division of labor. This means that the free market's auction process is dependent upon the enforcement of laws by the civil government. The Bible teaches this. Classical economics teaches this. All major schools of modern economics teach the this. The tiny handful of economists who identify themselves as anarcho-capitalists have not developed comprehensive monographs and treatises to show how society could function without civil governments. The Bible makes it clear that civil governments have superior authority to the free market in the limited areas that I cover in Part 6.

Free-market economic theory can offer a few insights into the operations of civil government. But free-market economics is based on the auction's principle of high bid wins. The high bids that win in democratic politics are votes. They are distributed on this basis: one citizen, one vote. Operationally, the pooling of these votes in the form of political action committees and pressure groups makes possible the purchase of politicians' support for some kinds of legislation. There have been some positive insights from economists that throw light on these arrangements. That school of thought known as public choice theory has made some breakthroughs. But, on the whole, economics has little to say about the operation of institu-

tions that do not operate in terms of an auction. This includes the church, the state, and the family. If it is inherently immoral to sell something, and therefore illegal, then whatever that item is will not be easy to analyze by means of the analogy of the auction process. Economists can analyze black markets accurately, but they cannot easily analyze the operations of nonprofit organizations, especially the state, which possesses a near-monopoly of violence.

It is a good idea for a Christian economist to understand what the Bible teaches on matters related to civil government. Even if his work is perceived as utopian, it is wise for him to devote time and effort to analyzing aspects of the government that are unlikely to be reformed in his lifetime. I have spent a great deal of my life making such analyses. This book is evidence. It took me four decades to do my homework to write this book. But a wise man understands the difference between utopianism that cannot be attained in history, unlikely political reforms that probably will not be attained in his lifetime, and reforms that are politically possible in his lifetime. Even if they are not capable of being reformed today, because the economy is stable, if the economy cannot sustain certain programs any longer, they will fall of their own weight. That is what happened in Communist China by 1979, and what happened in Communist Russia by 1991. It is wise to devote time and money to an analysis of how a biblical institutional arrangement ought to operate in today's world. This way, it may be possible to devise a practical plan to get from where we are today to where we might be, and should be, tomorrow if the existing system of civil government ever loses legitimacy as a result of the negative outcomes of its mandatory programs. Christian economists should develop monographs, reform programs, and educational materials that could be used, especially locally, in a time of economic crisis, when voters will be rethinking their presuppositions about how the civil government ought to work. The old rule is true: we can't beat something with nothing.

Persuading people to change their outlook is usually a fruitless task. It is expensive to change even one idea. This rule is true: we can't change only one thing. This is especially true of ideas, at least for people who take ideas seriously. Our first task is always to change our own ideas. We have to count the cost. Then we have to develop educational materials that will lay the foundation for other people to change their ideas when the time is right. The New Testament Greek word for such time is *kairos*. Is contrasted with

chronos. *Chronos* is about calendars. *Kairos* is about special times of opportunity. They become unified in unique times of significant change.

CONCLUSION

For which of you who desires to build a tower does not first sit down and count the cost to calculate if he has what he needs to complete it? Otherwise, when he has laid a foundation and is not able to finish, all who see it will begin to mock him, saying, "This man began to build and was not able to finish." Or what king, as he goes to encounter another king in war, will not sit down first and take advice about whether he is able with ten thousand men to fight the other king who comes against him with twenty thousand men? If not, while the other army is still far away, he sends a delegation and asks for conditions of peace. So therefore, any one of you who does not give up all that he has cannot be my disciple (Luke 14:28–33).

You have reached the end of the primary section of this book. Only appendixes remain. Congratulations. It is now time to count the cost of rereading all four volumes. This is what I am asking you to do if you choose to become a Christian economist. You have the general idea of what Christian economics is, as well as what it is not, by having read all four volumes, but you have not internalized them yet. You have not made them second nature to your thinking. Now the hard work must begin if you accept my challenge.

You will spend the remainder of your calling challenging the most entrenched, self-confident practitioners of what is known as social science: economists. Their degree of arrogance regarding the reliability of their presuppositions, their logic, and their methodology exceeds that of practitioners in any other social science. They are not noted for their humility. Yet they are not good as economic forecasters. Their confidence is in their conceptual apparatus, not their actual performance.

That by now you have an understanding of the epistemological sand on which modern humanism rests: the irreconcilable dualism of Kant's deterministic phenomenal realm of science vs. his noumenal realm of indeterminism, devoid of predictability and reason. In the field of social science,

the contrast between the self-confidence of the economists and the shaky foundation on which they have constructed their seemingly scientific edifice should be apparent to you by now. That is why I wrote Part 1 of this volume. I want to give you confidence in the face of what appears to be a scientifically validated intellectual construct. It is no more secure than the epistemology undergirding the science which supposedly validates it. Humanistic economic theory and modern science are like a pair of drunks who are holding up each other as they stagger home after an evening of self-congratulatory toasting.

My critique goes beyond a critical examination of Kantian presuppositions and their applications in economic science. The economist's problem is not merely intellectual. He faces the personal problem of the meaninglessness of his work, a problem that all humanists face. No modern social scientist was any more perceptive about the inherent limitations of the calling of science than Max Weber was. He was correctly perceived as an intellectual giant in his era. He is still widely acknowledged as the greatest social theorist of the twentieth century. He was not some crackpot on the fringes of the world of scholarship. He was a self-conscious humanist. He was willing to spell out the implications of a lifetime of academic learning. His forthright pair of presentations of what it means to be a humanistic scholar have long provided me with an incentive to complete my calling. I recognized early that humanism is bankrupt. No one made this clearer than Weber. The setting in which he made these admissions was also important.

Weber is famous among social scientists for two lectures, "Politics as a Vocation" (1919) and "Science as a Vocation" (1917). He delivered "Politics as a Vocation" ten weeks after the end of World War I. He spoke to students of the Free Students Union of Bavaria: January 28, 1919. This was during the post-war revolution when Munich was briefly the capital of the People's State of Bavaria, which was established on November 8, 1918 during the German Revolution. It replaced the Kingdom of Bavaria. It was led by Kurt Eisner until his assassination in February 1919. On April 6–7, Communists and anarchists jointly announced the creation of the Bavarian Soviet Republic. This experiment in Communism ended on May 6 after the Republic's army of 30,000 men lost to an army of 20,000 paramilitary troops of the demobilized German army. In short, Weber gave this lecture in a time of unprecedented local social upheaval. Yet no reader would guess this by reading this typically Germanic professorial verbal performance.

Vocation means calling. He had a specific view of calling in mind. He had described this in the articles he wrote in 1905 and 1906, which we know as *The Protestant Ethic and the Spirit of Capitalism*. He equated calling with occupation. I do not. I define calling very precisely: *the most important thing you can do with your life in which you would be most difficult to replace.*

A. Politics as a Vocation

In the final paragraph of his lecture on politics, he wrote: "Politics is a strong and slow boring of hard boards. It takes both passion and perspective. Certainly all historical experience confirms the truth—that man would not have attained the possible unless time and again he had reached out for the impossible. But to do that a man must be a leader, and not only a leader but a hero as well, in a very sober sense of the word. And even those who are neither leaders nor heroes must arm themselves with that steadfastness of heart which can brave even the crumbling of all hopes. This is necessary right now, or else men will not be able to attain even that which is possible today."

I first read this lecture in 1967, when I was taking an upper division sociology course from Robert Nisbet. I was a graduate student in history. Graduate students in one academic discipline rarely take courses outside their discipline. I did not honor this rule. The lecture appears in an early English-language compilation of his writings: *From Max Weber* (1946). That seemed like an old book in 1967: two whole decades. I write this in July 2019, a little over a century after Weber delivered the lecture. These words are crucial: "Politics is a strong and slow boring of hard boards." I have never been able to get these words out of my memory. I hope they will not get out of your memory, either.

It is not just politics that is marked by the strong, slow boring of hard boards. Every calling can be described accurately with these words. This is why so few people ever self-consciously adopt a calling. I tentatively did in 1960. It became self-conscious with me in the summer of 1963. You are now reading the culmination of my decision.

If you have been persuaded by the logic of my presentation in this volume, and also by the three volumes that preceded it, you must now make a self-evaluation. How important are these ideas in your life? Are they sufficiently important that you are ready to adopt as a calling the development of some of these ideas in your area of personal responsibility? If your answer

is yes, then you must reread all four volumes. This second reading must be more intense than the first. The second reading will provide your lifetime drill. There are a lot of boards.

B. Science as a Vocation

More important from the point of view of a life of scholarship is the other lecture: "Science is a Vocation." Most Weber scholars believe that he delivered this lecture at Munich University in the midst of World War I. The British blockade had reduced food supplies in Germany. It was a trying time.

The implications of this lecture have been in my memory ever since 1967. He opened with two questions. "What are the conditions of science as a vocation in the material sense of the term? What are the prospects of a graduate student who is resolved to dedicate himself professionally to science in university life?" Those two questions were before me in 1967. First, I had decided on my calling no later than in 1963: to develop an explicitly Christian theory of economics. I knew that no college was likely to pay me to do this. I also knew that few if any pastors or economists would take my work seriously, assuming that I completed it. Pastors are uninterested in economic theory, and economists are epistemological agnostics when it comes to God's role in economic theory. Second, I had a deferment from the military draft because I was a graduate student. The Vietnam war was still escalating. The death toll was still rising. I could therefore identify with the students he had addressed half a century earlier.

About a third of the way into his long lecture, he made this observation.

> In science, each of us knows that what he has accomplished will be antiquated in ten, twenty, fifty years. That is the fate to which science is subjected; it is the very meaning of scientific work, to which it is devoted in a quite specific sense, as compared with other spheres of culture for which in general the same holds. Every scientific 'fulfilment' raises new 'questions'; it asks to be 'surpassed' and outdated. Whoever wishes to serve science has to resign himself to this fact. Scientific works certainly can last as 'gratifications' because of their artistic quality, or they may remain important as a means of training. Yet they will be surpassed scientifically—let that be repeated—for it is our common fate and, more, our common goal. We cannot work without hoping

> that others will advance further than we have. In principle, this progress goes on *ad infinitum*. And with this we come to inquire into the *meaning* of science. For, after all, it is not self-evident that something subordinate to such a law is sensible and meaningful in itself (p. 138).

He then asked the obvious question: "Why does one engage in doing something that in reality never comes, and never can come, to an end?" He offered no answer. He was a consistent humanist. He viewed science as meaningless.

> Under these internal presuppositions, what is the meaning of science as a vocation, now after all these former illusions, the 'way to true being,' the 'way to true art,' the 'way to true nature,' the 'way to true God,' the 'way to true happiness,' have been dispelled? Tolstoi has given the simplest answer, with the words: 'Science is meaningless because it gives no answer to our question, the only question important for us: "What shall we do and how shall we live?"' That science does not give an answer to this is indisputable. The only question that remains is the sense in which science gives 'no' answer, and whether or not science might yet be of some use to the one who puts the question correctly (p. 143).

Weber understood what humanism and rationalism had done to the men of his era who had believed in humanism and rationalism. "The fate of our times is characterized by rationalization and intellectualization and, above all, by the 'disenchantment of the world.' Precisely the ultimate and most sublime values have retreated from public life either into the transcendental realm of mystic life or into the brotherliness of direct and personal human relations" (p. 155). That phrase—"the disenchantment of the world"—became one of his most famous. It is quoted in countless academic studies.

At the conclusion, he offered the young men in his audience no hope from science as a vocation. He said that hope lay in mystical retreat from this world.

> To the person who cannot bear the fate of the times like a man, one must say: may he rather return silently, without the usual

> publicity build-up of renegades, but simply and plainly. The arms of the old churches are opened widely and compassionately for him. After all, they do not make it hard for him. One way or another he has to bring his 'intellectual sacrifice'—that is inevitable. If he can really do it, we shall not rebuke him. For such an intellectual sacrifice in favor of an unconditional religious devotion is ethically quite a different matter than the evasion of the plain duty of intellectual integrity, which sets in if one lacks the courage to clarify one's own ultimate standpoint and rather facilitates this duty by feeble relative judgments. In my eyes, such religious return stands higher than the academic prophecy, which does not clearly realize that in the lecture-rooms of the university no other virtue holds but plain intellectual integrity (pp. 155–56).

I ask what seems to be the obvious ethical question: "Why should integrity matter in a cosmos that has been stripped of God's sovereignty, man's delegated authority over nature, fixed ethics, predictable ethical sanctions, and guaranteed hope in the future?" The combined message of Immanuel Kant and Charles Darwin by 1917 had done its corrosive work. World War I had stripped optimism out of the old liberalism to which Weber had been committed. His lecture on science offered no personal hope for intellectual life in Kant's realm of the phenomenal. There is nothing in that realm but meaninglessness and guaranteed obsolescence intellectually. All that he could offer as an alternative was Kant's realm of the noumenal. But there is no ethics in that realm. There is no meaning in that realm, either. There is no causation. It is devoid of anything rational. It does not connect with the realm of the phenomenal. It is as hopeless as Kant's phenomenal realm of science is.

He then called them to make a vain sacrifice: "We shall set to work and meet the 'demands of the day,' in human relations as well as in our vocation. This, however, is plain and simple, if each finds and obeys the demon who holds the fibers of his very life." That was how he ended his lecture. He died 16 months later at the age of 56.

This is the spiritual condition of consistent humanism. It offers no hope to its adherents. In contrast, the Bible offers hope to covenant-keepers, not just in eternity but also in history. With this in mind, you should reflect on this event.

> So the king sent to Dothan horses, chariots, and a large army. They came by night and surrounded the city. When the servant of the man of God had risen early and gone outside, behold, a large army with horses and chariots surrounded the city. His servant said to him, "Oh, my master! What will we do?" Elisha answered, "Do not fear, for those who are with us are more than those who are with them." Elisha prayed and said, "Lord, I beg that you will open his eyes that he may see." Then the Lord opened the servant's eyes, and he saw. Behold, the mountain was full of horses and chariots of fire around Elisha! When the Arameans came down to him, Elisha prayed to the Lord and said, "Strike these people blind, I ask you." So the Lord made them blind, just as Elisha had asked (II Kings 6:14–19).

This brings me back to the question of your calling.

C. Your Calling

What about you? If you are a Christian, there are people around you who will recommend something comparable to what Weber recommended to those young men. They will recommend pietistic withdrawal from the intellectual world. They will recommend personal ethics, a strong family life, and perhaps even ways of making a lot of money. I am offering you something very different. I am offering you a calling. The calling I am offering may not be the one for which you are best equipped. But you had better find some calling.

We do not live in Weber's imaginary Kantian/Darwinian world. Our work will not be overcome by scientific progress if it is committed to the Bible. It will be extended. Parts of it will be made obsolete. That is the price of progress. It is a small price to pay. The Bible teaches that there is linear history, and there is also historical progress. It will culminate in the final judgment, followed by the marriage supper of the Lamb. Then the accumulated capital of covenant-breakers and covenant-keepers will be transferred by God the Father to the bride of Christ. Christ will have paid this bride price: definitively at the cross, progressively in history, and finally. The positive results of your efforts in history will be part of that bride price. This inheritance will be transferred to you with a positive rate of return interest at the marriage supper of the Lamb.

I offer a warning. It is the warning that F. A. Hayek gave to a group of undergraduate economics majors in 1944. His address, "On Being an Economist," is reprinted in Volume III of his *Collected Works*. He said this: "We can never be sure what our suggestions will produce and whether our best meant efforts may not result in something very different from what we wish." This is the law of unintended consequences at work. I therefore recommend this strategy: *be precise in what you write*. Spell things out, even to the point of sounding needlessly obvious. Provide examples to clarify grandiose statements. Finally, specify what you are *not* saying. Close off avenues of misinterpretation.

Count the cost. If you then decide to become a Christian economics scholar as a calling, I offer this strategy. Correct my errors, extend my breakthroughs, write several monographs, produce videos, recruit and train followers, and do not become sidetracked. It is easy to become sidetracked, especially by money. Also, if someone asks you what kind of economist you are, never say "Northian." "Northist" is even worse. Say that you are a covenantalist.

Now, find your calling and get to work.

Appendix A

ECONOMICS: FROM REASON TO INTUITION

This, then, is a further sense in which Economics can be truly said to assume rationality in human society. It makes no pretence, as has been alleged so often, that action is necessarily rational in the sense that ends pursued are not mutually inconsistent. There is nothing in its generalisations which necessarily implies reflective deliberation in ultimate valuation. It rests upon no assumption that individuals will always act rationally. But it does depend for its practical raison d'etre upon the assumption that it is desirable that they should do so. It does assume that, within the bounds of necessity, it is desirable to choose ends which can be achieved harmoniously. – Lionel Robbins[1]

A. Epistemology

Epistemology asks this: "What can man know, and how can he know it?" Modern economics as a discipline suffers from the same crucial limitations found in all other post-Kantian fields of scholarship. Ultimately resting on a foundation of pure contingency and chaos, the economics profession affirms rationality as its *raison d'etre.* Yet economists cannot escape the fundamental rational antinomies of Kantian thought: unity vs. plurality, structure vs. change, law vs. freedom, science vs. personality, deduction vs. induction, theory vs. brute factuality, definition vs. application. When pushed to the limits of exposition, every economist finally rests his case on "intuition" or "experience" to bridge the unbridgeable Kantian gap between mind and matter. Reason collapses into mystery at the heart of the economist's task. What is the economist's task? This is a little hard for the economists to say exactly. James Buchanan in 1964 cited two classic definitions from a pair of Univer-

1. Lionel Robbins, *An Essay on the Nature and Significance of Economic Science* (London: Macmillan, 1932), p. 157. (http://bit.ly/RobbinsEcon)

sity of Chicago economists. Jacob Viner: "Economics is what economists do." Frank Knight: "And economists are those who do economics."[2]

The problem, to use Cornelius Van Til's phrase, is that for the most part, economists are not epistemologically self-conscious. In 1952, Fritz Machlup, while acting as chairman of an American Economic Association's workshop in methodology, remarked: "Usually only a small minority of American economists have professed interest in methodology. The large majority used to disclaim any interest in such issues."[3] Things have only become worse since then. The total triumph of mathematical economics has created a new, highly specialized economic technician who is buried in an esoteric universe of his own. Walter Adams remarked: "A methodological addict, he shows singular unconcern with the world as it exists. His standard of success—his pay-off matrix—is to impress the tastemakers of an ever-narrowing professional specialty. He is more and more cut off from specialists in other fields, and finds it increasingly difficult to communicate to the lay world. The result is a sort of apartheid: economists are no longer able to see the real world, and the world no longer can understand what economists are saying."[4] The quality of scholarship is increasingly Alexandrian: endless unreadable articles which have a half-life of six years or less, falling into oblivion with rare exception almost immediately."[5] Yet the basis of personal and departmental advancement is in the publication of such articles in a handful of specialized journals.[6]

New Left economists, whether Marxian, extreme Galbraithian, or whatever, temporarily challened the establishment economists to re-examine their calling in the late 1960s, but nothing came of this. Still, there was far more interest—critical interest—in epistemology since 1965 than could have been reasonably predicted in 1963. As Bronfenbrenner commented, in 1964 he could not find any indication of radical economics in America.

2. James Buchanan, "What Should Economists Do?" *Southern Economic Journal,* XXX (Jan. 1964), p. 213.

3. Fritz Machlup, "Introductory Remarks," *American Economic Review, Papers and Proceedings,* XLII (May 1952), p. 34.

4. Walter Adams, "Economic Science, Public Policy, and Public Understanding," *Diogenes* (Fall 1969), p. 24.

5. A. W. Coats, "The Role of Scholarly Journals in the History of Economics: An Essay," *Journal of Economic Literature,* IX (1971), p. 42.

6. John J. Siegfried, "The Publishing of Economic Papers and Its Impact on Graduate Faculty Ratings," *ibid.,* X (1972), pp. 31–49.

"Only five years later, in late 1969, the end of ideology had itself ended."[7] Walter Weisskopf could fight the good Galbraithian battle against methodological neutrality and sterility with his lively and unread *Alienation and Economics* (1971). But criticisms against irrelevance are, for the profession, annual rituals that have zero effect. The fact of the matter is, as Bronfenbrenner stated it: "The general economist may be travelling the way of the Dodo or Passenger Pigeon Highway to extinction. He survives—as I am a survivor—as dilettante, journalist, or elementary [principles] teacher, or as an exotic variety of multiple-specialist whose several specialisms fall in more than one of our ordinary classification boxes."[8] And it does not help the situation to read Joseph Schumpeter's remark that "Economists in particular, much to the detriment of their field, have attached unreasonable importance to being understood by the general public. . . ."[9] Yet he was eminently readable and a generalist; two decades later he would have found less reason to bother with writing that sentence. But the evil had already been accomplished; he got his wish!

One thing seems certain, however. Since 1965, we have not heard speeches like the one John Kennedy delivered at Yale University in 1962. It was one of those typical "end of ideology" performances by the consummate pragmatist of the era.

> Today these old sweeping issues have largely disappeared. The central domestic problems of our time are more subtle and less simple. They relate not to basic clashes of philosophy or ideology, but to ways and means of reaching common goals—to research for sophisticated solutions to complex and obstinate ideas. . . . What is at stake in our economic decisions today is not some grand warfare of rival ideologies which will sweep the country with passion, but the practical management of modern economy. What we need are not labels and cliches but more basic discus-

7. Martin Bronfenbrenner, "Radical Economics in America: A 1970 Survey," *Journal of Economic Literature,* VIII (1970), p. 747. Cf. *Wall Street Journal* (Feb. 11, 1972); *Business Week* (March 18, 1972).

8. Bronfenbrenner, "Trends, Cycles, and Fads in Economic Writing," *American Economic Review, Papers & Proceedings,* LVI (May 1966), p. 539.

9. Joseph A. Schumpeter, *A History of Economic Analysis* (New York: Oxford University Press, 1954), p. 10

> sion of the sophisticated and technical questions involved in keeping a great economic machinery moving ahead. I am suggesting that the problems of fiscal and monetary policy in the Sixties as opposed to the kinds of problems we faced in the Thirties demand subtle challenges for which technical answers—not political answers—must be provided. [10]

As it turned out, "can do" liberalism couldn't, and the United States government bogged down in a fruitless war in Vietnam. We saw the nation blow apart. Anyone wishing to read a post-mortem on JFK's faith in technocratic solutions can go through David Halberstam's *The Best and the Brightest.* The naïveté of this kind of worldview is officially dead, if not yet operationally defunct (due to tenure and other forms of guild control) in the economics profession. The established men may believe in technocratic wisdom, but they are at least more humble today.

B. What Is Economics?

There have been a number of influential economists over the years who have outspokenly denied the validity of the question. Vilfredo Pareto, the late-nineteenth-century social scientist, Gunnar Myrdal, and T. W. Hutchison were among these.[11] Schumpeter, whose *History of Economic Analysis* is a classic, was another.[12] Others, most notably Lionel Robbins, vigorously denied this form of skepticism. When open disagreement can exist on so fundamental a point as the definition of what constitutes a science, the extent of the intellectual confusion is indicated. Drawing hermetically sealed definitional boundaries is not possible, given the nature of human thought and the inescapable fact of unity and diversity in all created structures, but men need operational definitions for their work. Buchanan's warning in 1964 is significant: "Economics, as a well-defined subject of scholarship, seems to be disintegrating . . . and realistic appraisal suggests that this inexorable process will not be stopped."[13]

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10. John F. Kennedy, quoted by Theodore Roszak, *The Making of a Counter Culture* (Garden City, New York: Doubleday Anchor, 1969), p. 11
11. Israel Kirzner, *The Economic Point of View* (Princeton: Van Nostrand, 1960), p. 7.
12. Schumpeter, *History,* p. 10.
13. Buchanan, *op. cit.*, p. 222.

Israel Kirzner's very fine study of *The Economic Point of View* (1960) surveys several definitions of economics that have been employed by members of the profession since the seventeenth century: the study of trade, of wealth and welfare, of greed, of getting the most from the least, of money and measurement, of economic choice in a scarce world, of human action. But there is one common feature that stands out over three centuries, and William Letwin called attention to it forcefully: "Nevertheless there can be no doubt that economic theory owes its present development to the fact that some men, in thinking of economic phenomena, forcefully suspended all judgments of theology, morality, and justice, were willing to consider the economy as nothing more than an intricate mechanism, refraining for the while from asking whether the mechanism worked for good or evil. That separation was made during the seventeenth century."[14] The autonomy of academic economics from "metaphysics," namely any revelation from God, is the hallmark of all contemporary economic practice. Perhaps the strongest statement on behalf of the total autonomy of economics came from Ludwig von Mises, who equated liberalism and free market economics.

> Liberalism is based upon a purely rational and scientific theory of social cooperation. The policies it recommends are the application of a system of knowledge which does not refer in any way to sentiments, intuitive creeds for which no logically sufficient proof can be provided, mystical experiences, and the personal awareness of superhuman phenomena. . . . They [the policies] are radically opposed to all systems of theocracy. But they are entirely neutral with regard to religious beliefs which do not pretend to interfere with the conduct of social, political, and economic affairs."[15]

The most widely respected work in the area of modern economic epistemology is Lionel Robbins' *An Essay on the Nature and Significance of Economic Science* (1932). "The economist studies the disposal of scarce means," he wrote. "Economics is the science which studies human behaviour as a

14. William Letwin, *The Origins of Scientific Economics* (Garden City, New York: Doubleday Anchor, [1963] 1965), pp. 158–59.

15. Ludwig von Mises, *Human Action* (New Haven, Connecticut: Yale University Press, 1949), p. 155. (http://bit.ly/MisesHA)

relationship between ends and scarce means which have alternative uses."[16] Economics is a science of human choice among scarce alternative resources, according to Robbins. Biblically, we would say that he accepts the existence of the effects of Genesis 3:17–19, which separates him from the utopians, Marx, and many of the New Left economists.

So far, so good, but it does not stop here. Everyone who claims to be a modern scientist wants his colleagues to regard him as utterly neutral and objective. Of course, he admits in theory that this is ultimately impossible, citing Heisenberg, Kuhn, and so forth to show he is epistemologically literate, but at least all good scientists are neutral and objective with respect to revelational religion. Robbins was no less a part of this tradition of neutrality. "The economist is not concerned with ends as such. He is concerned with the way in which the attainment of ends is limited. The ends may be noble or they may be base. They may be 'material' or Immaterial'—if ends can so be described. But if the attainment of one set of ends involves the sacrifice of others, then it has an economic aspect."[17] *Ultimate ends are scientifically irrelevant*. The academic economist is primarily—perhaps entirely—a technician. Robbins believed that, in sealing off economics from questions of ultimate ends, he had accomplished a necessary intellectual task, but in fact he opened up an overwhelming problem for epistemology, one which almost no economist has had the courage to face publicly. Frank Knight was an exception.

> The "scientific" view assumes that changes in man can be completely accounted for in terms of external and prior natural conditions. A theory which recognizes ends and allows man real initiative in changing himself or his environment is in contradiction with a scientific conception of human nature and transfers the discussion to a different realm of discourse. In the writer's opinion the contradiction is insurmountable in the present stage of intellectual development. Philosophy and experience have not taught us concepts which enable us to think comfortably in the terms of what experience and common sense force us to recognize as real and valid.[18]

16. Robbins, *Nature and Significance*, p. 16.
17. *Ibid*., p. 25. Cf. Mises, *Human Action,* pp. 95–96.
18. Frank H. Knight, *On the History and Method of Economics* (Chicago: Univer-

This may be the reason that Armen Alchian, a leading economist and formerly chairman of the department at U.C.L.A., refused to use the word "choice" in front of a colloquium of graduate students and scholars in 1969. I was one of them. He hedged by using "demonstrated preference" or similar terms. The concept of choice implies an unscientific, methodologically unverifiable concept of human freedom, or so he believed.

There is nothing in Robbins' work to indicate that he understood the issue he was raising. He simply went on: "Economics is neutral as between ends. Economics cannot pronounce on the validity of ultimate judgments of value.'[19] And on: "Applied economics consists of propositions of the form, `If you want to do this, then you must do that.'"[20] The economist may only advise men in terms of their stated ends. I suppose the economist in Nazi Germany or the Soviet Union in the 1930s would not have questioned the national ends of liquidation or mass imprisonment; he only would have examined the technical questions concerning the least expensive means of accomplishing these ends. Economics is pure technique, and therefore value-free, you see. Economists promise not to tell moralists what to think in the realm of ends, and by this treaty they gain autonomy for their own technical activities. Moralists are supposed to agree not to influence the form or content of economics. As Friedman put it: "Positive economics is in principle independent of any particular ethical position or normative judgment."[21] Economics is therefore rational, as contrasted to moralistic or value-laden.

Why this religious quest for neutrality, for a value-free science? George Stigler, Friedman's colleague, who also won the Nobel Prize in economics, offered one straightforward explanation: "The reason for assigning such an austere role to economics is this: it is the fundamental tenet of those who believe in free discussion that matters of fact and of logic can (eventually) be agreed upon by competent men of good will, that matters of taste cannot be reconciled by free discussion. Assuming this to be true, it is apparent that if value judgments were mixed with logic and observation, a science would make but little progress."[22] F. A. Hayek announced a similar faith in human

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sity of Chicago Press, 1956), p. 194n.

19. Robbins, *Nature*, p. 147.

20. *Ibid*., p. 149.

21. Milton Friedman, *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953), p. 4.

22. George Stigler, *The Theory of Competitive Price* (New York: Macmillan,

reason. Speaking of those who favor socialistic solutions, he wrote: "Yet if we have not convinced them, the reason must be that our arguments are not yet quite good enough, that we have not yet made explicit some of the foundations on which our conclusions rest."[23] It is more than a little ironic that Hayek and Stigler, the proponents of faith in reason, both supporters of free market ideas, both colleagues at the University of Chicago, although not in the same department, could agree on the whole question of reason in the social sciences. Stigler was an inductionist, while Hayek's *Counter-Revolution of Science* is one of the most eloquent pleas for a deductivist approach. When groups of Chicago School economists and Austrian School economists used to get together in the late 1960s and early 1970s, they had to avoid the whole issue of epistemology if the conference was not to break down entirely. So much for the efficacy of (supposedly) screening out value judgments for the sake of sweet reason and ultimate intellectual accord.

C. Reason: Inductive

The vast bulk of economists regard themselves as essentially empirically oriented inductivists. They are men who rely, ultimately, on "the facts." They are not empiricists in the old German Historical School mold, however. That late-nineteenth-century group of Prussian academic socialists, led primarily by Gustav Schmoller, was initially committed to the premise that economic theory is always relative to time and place, and that only by exhaustive monographic studies of cultural history could scholars come to judgments about economic theory.[24] The approach of this school was holistic and organic: all of human life had to be studied, not simply an "isolated segment" known as economic life. This approach was so utterly fruitless in the production of economic theorems that it was generally abandoned by 1900. There were just too many data to handle coherently. The unsophisticated positivism of the German Historical School could not sustain itself against the demands of intellectual specialization. In order to examine human history, the investigator has to have an idea of what he is looking for, which in the area of economic history means that he needs some basic eco-

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1942), pp. 15–16.

23. F. A. Hayek, "The Defense of Our Civilization Against Intellectual Error," in *What's Past Is Prologue* (Irvington-on-Hudson, New York: Foundation for Economic Education, 1968), p. 41. (http://bit.ly/HayekDefense)

24. Schumpeter, *History of Economic Analysis*, pp. 807 ff.

nomic theory. "Facts" do not speak for themselves, and "laws" do not leap off of the pages of historical data.

Today's empirical economist is committed to the idea of economic theory. His model is generally that of the natural sciences. Friedman's description of positive economics is standard: "Its task is to provide a system of generalizations that can be used to make correct predictions about the consequences of any change in circumstances. Its performance is to be judged by the precision, scope, and conformity with experience of the predictions it yields."[25] He went on to state that the decisive test "is whether the hypothesis works for the phenomena it purports to explain."[26] The test is therefore factual: "Only factual evidence can show whether it [theory] is 'right' or 'wrong' or, better, tentatively 'accepted' as valid or 'rejected.' "[27] Economics is empirical, inductive, *a posteriori,* fact-oriented. Facts cannot prove a theory, but they may fail to disprove some theories.[28] The process is: . . . facts . . . theory . . . facts . . . theory—endlessly, always in a refining process.[29] If you can find a better theory (at no extra cost), choose it.

Friedman then confronted a basic post-Kantian antinomy, the problem of defining "theory," "fact," and explaining the interrelationship of each to each and both to the human mind.

> More generally, a hypothesis or theory consists of an assertion that certain forces are, and by implication others are not, important for a particular class of phenomena and a specification of the manner of action of the forces it asserts to be important. We can regard the hypothesis as consisting of two parts: first, a conceptual world or abstract model simpler than the "real world" and containing only the forces that the hypothesis asserts to be important [Weber's "ideal type"—G.N.]; second, a set of rules defining the class of phenomena for which the "model" can be taken to be an adequate representation of the "real world" and specifying the correspondence between the variables or entities in the model and observable phenomena.

25. Friedman, *Essay*s, p. 4.
26. *Ibid*., p. 30.
27. *Ibid*., p. 8.
28. *Ibid*., p. 9.
29. *Ibid*., p. 139.

> These two parts are very different in character. The model is abstract and complete; it is an "algebra" or "logic." Mathematics and formal logic come into their own in checking its consistency and completeness and exploring its implications. There is no place in the model for, and no function to be served by, vagueness, maybe's, or approximations. The air pressure is zero, not "small," for a vacuum; the demand curve for the product of a competitive producer is horizontal (has a slope of zero), not "almost horizontal."
>
> The rules for using the model, on the other hand, cannot possibly be abstract and complete. They must be concrete and in consequence incomplete—completeness is possible only in a conceptual world, not in the "real world," however it may be interpreted. . . . In seeking to make a science as "objective" as possible, our aim should be to formulate the rules explicitly in so far as possible and continually to widen the range of phenomena for which it is possible to do so. But, no matter how successful we may be in this attempt, there inevitably will remain room for judgment in applying the rules. Each occurrence has some features peculiarly its own, not covered by the explicit rules. The capacity to judge that these are or are not to be disregarded, that they should or should not affect what observable phenomena are to be identified with what entities in the model, is something that cannot be taught; it can be learned but only by experience and exposure to the "right" scientific atmosphere, not by rote. It is at this point that the "amateur" is separated from the "professional" in all sciences and that the thin line is drawn which distinguishes the "crackpot" from the scientist.[30]

First, just how coherent is the model? Friedman asserted that it can be consistent and complete. I suspect that he was here giving more credit to a rival discipline—mathematics—than the discipline's best minds ever claim for it. Kurt Gödel's hypothesis denies that a mathematical proposition can be simultaneously consistent and complete, which is precisely what Friedman naïvely asserts as an ideal for the logic of the economic model.

30. *Ibid*., pp. 24–25.

Second, how do the rules for using the model actually connect it with the data? Why is such a contact possible? Eugene Wigner, the Nobel Prize winner in physics, has called attention to this very anomaly: it is an unreasonably effective correspondence which secular scientists simply cannot explain.[31] If the rules are incomplete, how can they be fitted with the "complete" model?

Third, the "real world," which Friedman was careful to put in quotation marks, is really the product of our senses, as interpreted by our minds. In Kantian language, concepts without percepts are empty, while percepts without concepts are blind. So, the data are never raw; there is no operational brute factuality. The data are already interpreted as we receive them. How do we know, for example, when a perceived trade cycle is nothing more than the product of our own ingenuity? The great mathematical economist Ragnar Frisch once demonstrated the existence of a particular economic cycle before a group of professional colleagues—a regularity where none had been perceived before by any of them. Harlan McCracken describes the finale: "When the group was thrilled and almost dumfounded by the results, they were mildly informed that the omega operations had been performed on a relief map of Europe."[32]

Finally, what of Friedman's appeal to "the capacity to judge" and "experience"? Here we have an appeal, ultimately, to some form of intuition as the means of bridging the gap between the model and the perceived historical data (which may or may not be in conformity to the economic world "out there"). There is no strict one-to-one application of the abstract mental model and perceived reality, for then the model would be as complex as reality itself, swallowed up in the immensity of brute factuality. Yet it is believed to be in conformity to the basic outline of the already perceived facts. But how do we know? How can we have such faith in the coherence of our minds, the orderliness of nature, and the intuitive ability of our minds (or whatever it is) to bridge the gap? We must exercise faith—a remarkable

31. Eugene P. Wigner, "The Unreasonable Effectiveness of Mathematics in the Natural Sciences," *Communications on Pure and Applied Mathematics,* XIII (1960), pp. 1–14. (http://bit.ly/WignerScience)

32. McCracken, "Comments," *American Economic Review, Papers & Proceedings,* XLIII (May 1953), p. 277. Cf. Gunther Stent, *The Coming of the Golden Age: A View of the End of Progress* (Garden City, New York: Natural History Press, 1969), pp. 115 ff.;Benoit Mandelbrot, "New Methods in Statistical Economics," *Journal of Political Economy,* LXXI (1963), pp. 421 ff.

quantity of faith. Without it, there could be no economics. So our neutral, rationalistic practitioners simply put this statement of faith in the back of their minds and forget it. Epistemology, at the truly crucial points, is not a popular topic among secularists.

Ultimately, Friedman asserted, "The construction of hypotheses is a creative act of inspiration, intuition, and invention; its essence is the vision of something new in familiar material."[33] He was quite correct, of course, but this does not answer the question. How is man so endowed, for what purpose does he have the gift? How, in fact, are we sure on rational grounds that he does have it? We need a theory to explain the phenomenon, and intuition, being nonrational at bottom, cannot be made to fit any rationalistic theory. We think we perceive men in the activity of linking theories and facts, but can they do this axccurately, really, and if so, how? In effect, the secularist replies, "he just can, that's all!" Faith, faith, wonderful faith!

Is there some accepted, fairly stable body of acceptable theory? Probably not, says Friedman. "Observed facts are necessarily finite in number; possible hypotheses, infinite" [I do not understand this—G.N.][34] Furthermore, "Any theory is necessarily provisional and subject to change with the advance of knowledge."[35] In short, all we can say, somehow, in faith, is that "some parts of economic theory clearly deserve more confidence than others."[36] (Try and find one that all economists agree on!) You can check these statements by comparing them with "facts." But which facts? Facts selected by which theorist? Not all facts, since our knowledge can never be exhaustive.[37] Remember, "we cannot perceive `facts' without a theory."[38] Yet within the shifting sands of knowledge, there is somehow structure enough to establish an academic discipline. Or at least maybe there is.

Van Til put this problem in a starkly penetrating analysis.

> If man is made the final reference point in predication, knowledge cannot get under way, and if it could get under way it could not move forward. That is to say, in all non-Christian forms of

33. Friedman, *Essays*, p. 13.
34. *Ibid*., p. 9.
35. *Ibid*., p. 41.
36. *Idem*.
37. *Ibid*., p. 32.
38. *Ibid*., p. 34.

> epistemology there is first the idea that to be understood a fact must be understood exhaustively. It must be reducible to a part of a system of timeless logic. But man himself and the facts of his experience are subject to change. How is he ever to find within himself an a priori resting point? He himself is on the move. . . . If we do not with Calvin presuppose the self-contained God back of the self-conscious act of the knowing mind of man, we are doomed to be lost in an endless and bottomless flux.[39]

Is there a coherent world out there, out beyond the powers of our perception? Does it, or some part of it, conform to the logical structure of our minds? Is there some means by which we can discover such order? How do we find the rules that might allow us to make deductions from our theories and predictions about the facts? The facts are like beads for the secularist, said Van Til, and the theories are like string. But on the premises of the secularist, the beads have no holes in them, and the string is infinitely long. Furthermore, there may be more than one string! The only way to string them is unknown, and this the secularist calls "intuition." Friedman was no different from epistemologists in other academic disciplines. Either theory is swallowed up in the facts, or else the facts are swallowed up by the theory, or else theory remains wholly removed from all facts. Van Til's words are inescapable:

> The point we are now concerned to stress is the atomistic character of the non-Christian methodology. The idea of system is for it merely a limiting notion. It is merely ideal. What is more, it must forever remain but an ideal. To become reality this ideal would have to destroy science itself. It would have to demolish the individuality of each fact as it came to know it. But if it did this, it would no longer be knowledge of a fact that is different from any other fact. The method of non-Christian science then requires that to be known facts must be known as part of a system. And since the Christian idea of a system as due to the counsel of God is by definition excluded, it is man himself that must know this

39. Cornelius Van Til, *An Introduction to Systematic Theology* (Phillipsburg, New Jersey: Presbyterian and Reformed, [1961] 1978), p. 167, vol. V of *In Defense of the Faith*.

> system. But to know the system he must know it intuitively. He cannot know it discursively because discursive thought, if it is to be in contact with reality at all, must partake of the piecemeal character of non-rational being. Each individual concept that pretends to be a concept with respect to things that have their existence in the world of time must partake of the *de facto* character of these facts themselves.[40]

Intuitive knowledge is all that is left for man, and intuitive knowledge, not being discursive, participates in the chaos of random factuality, i.e., is not rational knowledge. Friedman, ending as he did with intuition, destroyed the logical character of hypothetically rational inductive economic science. *At the heart of "rational" inductive thought is a bedrock of irrationalism*. Without a doctrine of divine creation, the inductive rationalist builds his foundation on the sand of pure chance, and whirl does not give up his kingdom.

I have not singled out Friedman as a stick man. He was an eloquent defender of modern economic science, and his chapter on methodology has become standard in the profession. Other expositions echo his. Gregor Sebba, a mathematical economist, has raised similar issues. He wrote that "Classical economics made the tremendous discovery that the quantifiable features of a modern economy can be represented by a general mechanistic model capable of mathematization and presumably prediction."[41] Positive economics, officially neutral with respect to values, can predict the future. But with prediction comes control, Sebba argued. New forms of macroeconomic planning are possible through the use of input-output techniques developed by both Soviet and Western economists. "Here the distinction between 'technical' and 'economic' problems obviously no longer applies."[42] But then a problem appears which had been held back by the hypothetical value neutrality of positive economic theory. "Unlike classical theory, it is not confined to the question what the terminal state of the economic sys-

40. Cornelius Van Til, *Apologetics* (Syllabus, Westminster Theological Seminary, 1959), pp. 76–77.

41. Gregor Sebba, "The Development of the Concepts of Mechanism and Model in Physical Science and Economic Thought," *American Economic Review, Papers & Proceedings,* XLIII (May 1953), p. 261.

42. *Ibid*., p. 263.

tem will be, given its initial state and its laws of operation; normative economics can simultaneously consider the initial and the terminal state and select the minimum path from one to another. The theory of allocations has the markings of a rigorous, predictive, general theory of planning."[43] Hayek demonstrated eloquently in his *Road to Serfdom* (1944) that central planning can never be neutral; it is based on the value preferences of the central planners.

Positive economics, because it involves knowledge, necessarily involves power. And power is never neutrally applied. Sebba saw this clearly, and he drove home his point.

> Control then consists of prediction offered as purely technical, neutral, powerless advice. The sons of Adam Smith fear control of man over man. And rightly so, for such control implies the dehumanization of the human realm. The ethos of classical economics revolts against this consequence. But its epistemology works towards it. So long as the theory is unpredictive, the conflict can remain unresolved and even undetected. But should the theory become predictive, it may yet turn against its origins and become instrumental in subverting economic freedom.[44]

The *nature-freedom antinomy* of all modern thought reasserts itself once again. On the one hand, knowledge of the world is seen as giving men power and therefore freedom from an impersonal, capricious universe. Yet with the advent of power, man falls under the sway of his own creation, like Dr. Frankenstein and his monster. Man, defined as being no more than a natural creature, becomes as subject to his own laws as nature is. *Secular law eats away at the foundations of secular freedom.*[45] Classical economics destroys itself in an orgy of planning. The attempt at being epistemologically neutral to God and all values becomes dust in the mouth; values, never

43. *Ibid*., p. 264.

44. *Ibid*., p. 266.

45. It seems to me to be quite likely that input-output analysis will prove to be premature, and that Mises' argument that without a free market and private ownership, no rational planning is possible, will reassert itself. But to the extent that modern economists believe that they have predictive power due to any economic tool, there is a tendency for that tool to become a means of economic planning and external control.

truly banished from science's closed universe, reappear in power.

D. Reason: Deductive

For almost a century, deductive reasoning in the social sciences has been out of favor. Its defenders are limited almost exclusively in economics to the followers of Ludwig von Mises. Inductive reason, supposedly the characteristic of the natural sciences, has been adopted by most modern economists. Now, however, the perception on the part of some social scientists of the implications of Thomas Kuhn's *The Structure of Scientific Revolutions* (1962) has begun to shake their faith in the paradigm of purely inductive research. It has become more and more obvious to the readers of Kuhn's book that there is no scholarship apart from intellectual presuppositions. Academic guilds form around an accepted body of these premises, and they in turn become the foundation of "normal science"—the drudge-like repetitive science of the vast majority of men in any given era or discipline. Thus, research is guild-oriented and essentially *a priori:* the questions asked, the ways in which the questions are to be answered, the form of presentation of the answer are all determined by the prevailing definition of the particular discipline as set forth by the academic guild. Thus, Kuhn's analysis argues, science is never purely inductive, objective, or neutral. It is governed by presuppositions that are thought to be "rational" and "inescapable." From time to time younger members of the guild do escape them, overturning the accepted paradigm; this constitutes a scientific revolution.

The writings of Ludwig von Mises constitute the strongest case for pure deductive rationalism. He took seriously the second half of Kant's slogan, "percepts without concepts are blind." There is no scientific investigation by the social scientist that is not in terms of fixed intellectual categories. His was the consistent Kantian world of humanism. Man is the starting point. *"Panta rei,* everything is in ceaseless flux, says Heraclitus; there is no permanent being; all is change and becoming. . . . For epistemology, the theory of human knowledge, there is certainly something that it cannot help considering as permanent, viz., the logical and praxeological [science of human action] structure of the human mind, on the one hand, and the power of the human senses, on the other hand."[46] Mises brought back the old debate between Parmenides and Heraclitus. Parmenides held, in Van Til's words,

46. Lugwig von Mises, *The Ultimate Foundation of Economic Science: An Essay on Method* (Princeton: Van Nostrand, 1962), p. 1.

"that only that can exist which is fully subject to the laws of human logic. In other words Parmenides assumes that the reach of human logic is the limit of possible existence."[47] But Heraclitus countered that the essence of the world is flux, beyond the static categories of universal human reason. Along with all post-Kantians, Mises held to both positions: logic is static and can understand some things "out there," but there is some aspect of flux and chaos in the universe, and it is here that man finds his freedom from totalitarian humanistic law. In other words, as far as human nature is concerned, "epistemology must look upon it as unchanging."

Man needs an unchanging point of reference, Mises believed, if he is to be able to say anything accurate about anything. *The unchanging point of reference is the human mind.*

> Kant, awakened by Hume from his "dogmatic slumbers," put the rationalistic doctrine upon a new basis. Experience, he taught, provides only the raw material out of which the mind forms what is called knowledge. All knowledge is conditioned by the categories that precede any data of experience both in time and in logic. The categories are a priori; they are the mental equipment of the individual that enables him to think and—we may add—to act. As all reasoning presupposes the a priori categories, it is vain to embark upon attempts to prove or disprove them.[48]

What are these categories? They are independent of biological evolution. Evolution is continuous, while the catagories appeared in man discontinuously.[49] They are not innate ideas. "They are the necessary mental tool to arrange sense data in a systematic way, and transform them into facts of experience. . . ."[50] They are *pragmatic:* "Only those groups could survive whose numbers acted in accordance with the right categories, i.e., with those that were in conformity with reality and therefore—to use the concept of pragmatism—worked."[51] Apparently, had the world been a different kind of world, those using the categories would not have survived, and the

47. Cornelius Van Til, *A Christian Theory of Knowledge* (Nutley, New Jersey: Presbyterian and Reformed Publishing Co., 1969), p. 171.
48. Mises, *Ultimate Foundation*, p. 12.
49. *Ibid.*, pp. 8, 14.
50. *Ibid.*, p. 16.
51. *Ibid.*, p. 15.

categories would have disappeared—not, somehow, evolving into something else. Where categories are concerned, life is one huge crap shoot; you either have them, or you don't. Or, paraphrasing one scholar, "when you're hot, you're hot, and when you're not, you're not."[52]

The reason that the categories function is that the universe is orderly, in part. "No thinking and no acting would be possible to man if the universe were chaotic, i.e., if there were no regularity whatever in the succession and concatenation of events. In such a world of unlimited contingency nothing could be perceived but ceaseless kaleidoscopic change. There would be no possibility for man to expect anything."[53] Therefore, he concluded, "Reasoning is necessarily always deductive. . . . All human knowledge concerning the universe presupposes and rests upon the cognition of the regularity in the succession and concatenation of observable events. It would be vain to search for a rule if there were no regularity."[54]

This is empiricism's Achilles heel: it rejects the category of regularity in the microscopic sphere, looking instead for statistical laws of probability in aggregate events. Empiricists fail to search for explanations in terms of individual human action.[55] It is a misuse of the methodology of the natural sciences, on the assumption that people are not acting beings. Empiricism postulates pure randomness of individual events.[56]

Mises came to the heart of the epistemological problem:

> Following in the wake of Kant's analysis, philosophers raised the question: How can the human mind, by aprioristic thinking, deal with the reality of the external world? As far as praxeology [the science of human action] is concerned, the answer is obvious. Both, a priori thinking and reasoning on the one hand and human action on the other, are manifestations of the human mind. The logical structure of the human mind creates the reality of the action. Reason and action are congeneric and homogeneous, two aspects of the same phenomenon.[57]

52. Http://bit.ly/jrwyhyh
53. *Mises, Ultimate Foundation*, p. 19.
54. *Ibid.*, p. 19.
55. *Ibid.*, p. 23.
56. *Ibid.*, pp. 21–22.
57. *Ibid.*, p. 42.

Mises was far more epistemologically self-conscious than most contemporary economists. He knew the ground on which all modern secularists must stand if they are to defend the idea of modern science from total chaos, and so he affirmed, as Kant did, the creative ordering power of the human mind. This, as Van Til argued throughout his career, is the heart of modern Kantian thought. Mises acknowledged it and built upon it.

The historical sciences, however, are different from praxeology and its most developed subdivision, economics. History is concerned with the flux of human life, not regularities. "What distinguishes the descriptions of history from those of the natural sciences is that they are not interpreted in the light of the category of regularity."[58] Men must look to history for *meaning;* unlike natural events, men act in terms of final causes. The interpreter searches for meaning in the minds of the participants: what did it mean for them? "The autonomy of history or, as we may say, of the various historical disciplines consists of their dedication to the study of meaning."[59] The goal is radical autonomy: "History is man-centered; it has nothing to do with any point of view of God or some quasi-God. . . ."[60] Man provides the meaning. God's knowledge is not available to man.[61] However, the mind is bounded by the limits of understanding: the "meaning of the whole" is beyond us.[62] There are no general laws in history; historical events are entirely unique.[63] The historian must select the "relevant" facts. Yet despite this process of selection, historiography must be neutral. He wrote: "A historian must first of all aim at cognition. He must free himself from any partiality. He must in this sense be neutral with regard to any value judgments."[64] The historian must select, yet be neutral. He did not explain how this is possible. (Neither

58. *Ibid.,* pp. 27–28. Cf. the exchange on this point between Gary S. Becker, an empiricist of the Chicago School, and Israel Kirzner, a follower of Mises: Becker, "Irrational Action and Economic Theory," *Journal of Political Economy,* LXX (Feb. 1962); Kirzner, "Rational Action and Economic Theory," *JPE*, LXX (Aug. 1962); "Reply" and "Rejoinder," *JPE,* LXXI (Feb. 1963).

59. *Ibid*., p. 42.

60. *Ibid*., p. 43.

61. *Ibid*., pp. 37, 64.

62. Ludwig von Mises, *Epistemological Problems of Economics* (Princeton: Van Nostrand, 1960), p. 48. (http://bit.ly/MisesEPE)

63. Mises, *Theory and History: An Interpretation of Social and Economic Evolution* (Auburn, Alabama: Mises Institute, [1957] 2007), p. 212. (http://bit.ly/Mises-TAH)

64. Mises, *Human Action*, p. 48.

has any historian.)

The rock-bottom data that resist classification in terms of the categories of the social sciences are those that are historically unique. Here, the historian must use "sympathy" or "understanding" in order to make these data intelligible. However, such understanding must not contradict the teachings of neutral social science. No matter how many historical documents testify to the existence of a devil, "no appeal to understanding could justify a historian's attempt to maintain that the devil really existed otherwise than in the visions of an excited human brain."[65] The same, of course, is true of any relationship between witches and the devi1.[66]

How objectivity is to be guaranteed, or even thought to be possible, in the historical sciences is never explained. How does the historian know that his sympathetic understanding of the motives or hopes of past individuals has any relationship with the past? How can he be certain that his understanding links up with theirs? There can never be such assurance. Furthermore, how can the bedrock data of history be related to any system of general understanding? How is it possible to make sense out of the infinite data of history? Mises assumed too much for the historical disciplines. He gave too much credit to the ability of the irrationalist powers of the Kantian noumenal "understanding" to make intelligible judgments and statements about Kant's phenomenal realm.

How do we link the *a priori* categories of the mind with the external reality of the social sciences? On this point, Mises was forthright. We cannot explain this connection. *The scientist needs ultimate presuppositions that cannot be proven.* Life and death are mysteries.

> Science, which is dependent both on discursive reasoning and on experience, does not present us with a unified picture of the world. It reduces phenomena to a number of concepts and propositions that we must accept as ultimate, without being able to establish a connection between them. It proves incapable of closing the gap that exists between the system of the science of human thought and action and the system of the sciences of physical nature. It does not know how to find a bridge between sentience and motion or between consciousness and matter. What life and

65. *Ibid*., p. 51.
66. Mises, *Epistemological Problems*, p. 100.

death are elude its grasp.[67]

There is an inescapable dualism in Mises' Kantian universe, and Mises was perfectly willing to admit its existence.

> But as long as we do not know how external (physical and physiological) facts produce in a human "soul" definite thoughts and volitions resulting in concrete acts, we have to face an insurmountable dualism. In the present state of our knowledge, the fundamental statements of positivism and monism are mere metaphysical postulates devoid of any scientific foundation. Reason and experience show us two separate realms: the external world of physical and physiological events and the internal world of thought, feeling, and purposeful action. No bridge connects—as far as we can see today—these two spheres. Identical external events result sometimes in different human responses, and different external events produce sometimes the same human response. We do not know why.[68]

But if a gap of total ignorance exists between the external event and human will, then the will is totally separated from the external world. This is the most fundamental of all Kantian dualisms. Action, argued Mises, "is the outcome of a man's will. Of course, we do not know what will is. We simply call *will* man's faculty to choose between different states of affairs. . . ."[69] This seems to be the equivalent of Friedman's *intuition.* It is the mysterious bridge between thought and action, between stimulus and response. Secularists can never be sure whether this relationship is active—thought leading to action—or passive—response to a stimulus.

How do we know if our *a priori* mental concepts correspond with the facts of the external world? "The question whether or not the real conditions of the external world correspond to these assumptions is to be answered by experience."[70] *Experience:* we are back to Friedman's intuitional,

67. *Ibid*., p. 44.

68. Ludwig von Mises, "The Treatment of 'Irrationality' in the Social Sciences," *Philosophy and Phenomenological Research,* IV (June 1944), section VI.

69. *Ibid*., section II.

70. Mises, *Ultimate Foundation*, p. 44.

experiential link. We are back to testing once again—testing, on the assumption that there is the mind-matter link. Mises acted in faith that this mystical link exists, although he denied any mysticism in such an affirmation. "Science is sobriety and clarity of conception, not intoxicated vision."[71] But what is experience? How does it relate mind and external matter? Is it the same as will? Is it the same as intuition? How sure are we of the correspondence of the two realms? Not very. "But if the answer is affirmative, all the conclusions drawn by logically correct praxeological reasoning strictly describe what is going on in reality."[72] If the answer is in the affirmative, our *a priori* mental concepts correspond with data—some data, i.e., the relevant data—of the external world. Here is a huge "if clause" in Mises' epistemology. It is, in fact, a statement of faith, incapable of proof, as he admitted, and yet the very intellectual foundation of his *a priori* rationalism.

Our ignorance of the nature of this link between mind and matter is the source of our personal freedom. On the other hand, our faith in its existence is the source of our knowledge and power. Here is the Kantian nature-freedom antinomy in its sharpest form. We need power to escape the chaos of nature—to gain freedom as men in nature—yet this power destroys our freedom, or threatens to. Mises wrote:

> We do not know how out of the encounter of a human individuality, i.e., a man as he has been formed by all he has inherited and by all he has experienced, and a new experience definite ideas result and determine the individual's conduct. We do not even have and surmise how such knowledge could be acquired. More than that, we realize that if such knowledge were attainable for men, and if, consequently, the formation of ideas and thereby the will could be manipulated in the way machines are operated by the engineer, human conditions would be essentially altered. There would yawn a wide gulf between those who manipulate other people's ideas and will and those whose ideas and will are manipulated by others.[73]

71. Mises, *Epistemological Problems*, p. 46.
72. Mises, *Ultimate Foundation*, p. 45.
73. *Ibid.*, p. 58.

If autonomous man can use his mind to shape nature, why can't an elite of power-seeking men use science to shape society's masses? Here is the heart of the dilemma sketched by C. S. Lewis in his *Abolition of Man* and *That Hideous Strength.* It is an inescapable contradiction in all post-Kantian thought. Secularists must affirm the existence of the mind-matter link, yet they dare not affirm it.

Within the framework of this antinomy, man's ignorance of the nature of this link—indeterminacy—protects him from manipulation by other men. Yet it is the determinacy of the link that allows him to control nature (of which man is said to be a part). Thus, we are said to be able to rationalize only a few segments of reality. "Reason and science deal only with isolated fragments detached from the living whole and thereby killed."[74] Mises then retreated into Kantian mysticism in order to preserve man's freedom and living humanity. "This personal experience of wholeness, unity, and infinity is the loftiest peak of human existence. It is the awakening to a higher humanity. It alone transforms everyday living into true living. It is not vouchsafed to us daily or at all places. The occasions on which we are brought closer to the world spirit must await a propitious hour."[75]

To recapitulate, the foundation of economic reasoning is the existence of universal, timeless categories of human logic.[76] All facts require theories to interpret them; there can be no uninterpreted factuality for men to deal with intellectually. Thus, facts cannot refute accurate theories, since they have existence only in terms of theories. The theories are autonomous. "They are not subject to verification or falsification on the ground of experience and facts."[77] On this issue, Mises was forced to appeal to *experience* in answering the question concerning the existence of the mind-matter link.[78] Thus, he both affirmed and denied experience as a means of checking the validity of his theorems' applicability. Experience in some necessarily unstated way links theory to fact, yet it cannot criticize theory. But it can somehow *warn* theory: "If the facts do not confirm the theory, the cause perhaps may lie in the imperfection of the theory. The disagreement between the theory and the facts of experience consequently forces us to think

74. Mises, *Epistemological Problems*, p. 44.
75. *Ibid.*, p. 45.
76. *Ibid.*, p. 27. See also pages 198, 204.
77. Mises, *Human Action*, p. 32.
78. Mises, *Ultimate Foundation*, p. 44.

through the problems of the theory again. But so long as re-examination of the theory uncovers no errors in our thinking, we are not entitled to doubt its truth."[79] And experience *can* criticize *bad* theory: "Precisely because the phenomena of historical experience are complex, the inadequacies of an erroneous theory are less effectively revealed when experience contradicts it than when it is assessed in the light of correct theory."[80] But these inadequacies are, apparently, revealed in part, though less effectively than by theory, through the contradictions of experience. It is impossible to give a precise definition of "experience" as found in Mises' writings.

On the one hand, we are asked to believe that science is value-free, since "no standard of value of any kind is contained in the system of economic or sociological theory or in the teachings of liberalism, which constitute the practical application of this theory to action in society."[81] On the other hand, we are not supposed to regard as in any way value-laden the following statement: "Every individual desires life, health, and well-being for himself and his friends and close relations."[82] Conclusion:

> To the man who adopts the scientific method in reflecting upon the problems of human action, liberalism must appear as the only policy that can lead to lasting well-being for himself, his friends, and his loved ones, and, indeed, for all others as well. Only one who does not want to achieve such ends as life, health, and prosperity for himself, his friends, and those he loves, only one who prefers sickness, misery, and suffering may reject the reasoning of liberalism on the ground that it is not neutral with regard to value judgments.[83]

In contrast, the Bible states explicitly, "But he who fails to find me injures himself;all who hate me love death" (Proverbs 8:36). Even if all men were to agree about the true nature of health, joy, and the good life, it does not follow that all men truly want these things.

Mises' hypothetical neutrality is uncritically naïve. He held to a value-

79. Mises, *Epistemological Problems*, p. 50.
80. *Ibid*., p. 29.
81. *Ibid*., p. 40.
82. *Ibid*., p. 38.
83. *Ibid*., p. 39.

free science that in turn presupposes agreement among all men concerning "the good life." What he assumed is the universal validity of the goals of Western civilization, which is in itself an overwhelming mental abstraction.[84]

> Of course, the objections the economists advanced to the plans of the socialists and interventionists carry no weight with those who do not approve of the ends which the peoples of Western civilization take for granted. Those who prefer penury and slavery to material well-being and all that can only develop where there is material well-being may deem all these objections irrelevant. But the economists have repeatedly emphasized that they deal with socialism and interventionism from the point of view of the generally accepted values of Western civilization.[85]

While Western civilization may well have been the product of a worldview based on the idea of the sovereignty of the God of the Bible, a possibility that Mises did not mention, today our universe is closed to God, he insisted. "It is not to be denied that the loftiest theme that human thought can set for itself is reflection on absolute questions. Whether such reflection can accomplish anything is doubtful."[86]

> Our own thinking is utterly powerless to discover anything whatever about what such a superhuman or divine being would think. But within the cosmos in which our action is effective and in which our thinking paves the way for action, the findings of our scientific reasoning are so securely established as to render meaningless the statement that, in a broader setting or in a deeper sense, they would have to lose their validity and yield to some other cognition.[87]

God and His revelation are therefore irrelevant for the content of eco-

84. Robert A. Nisbet, *Social Change and History* (New York: Oxford University Press, 1969), pp. 245–46.
85. Mises, *Theory and History*, p. 33.
86. Mises, *Epistemological Problems*, p. 49.
87. *Ibid*., p. 50.

nomic science, since "whatever firmly withstands the logical scrutiny of our reason can in no way be refuted by the assertions of metaphysics."[88] In short, "We may leave aside the genuine dogmas such as Creation, Incarnation, the Trinity, as they have no direct bearing on the problems of interhuman relations."[89] We can say nothing about God at all. However, God *is* "wholly other from man."[90] He is incapable of action (being perfect).[91] He is socially irrelevant.[92] The only universals for man are the universal categories of his own mind.[93] Without these, men could not think or act, so these *have* to exist.[94]

Man's dignity stems from his freedom. Yet he lives in a determinate universe in which universal laws rule. Still, "The main fact about human action is that in regard to it there is no such regularity in the conjunction of phenomena. It is not a shortcoming of the sciences of human action that they have not succeeded in discovering determinate stimulus-response patterns. What does not exist cannot be discovered."[95] Yet that such patterns may exist.

> . . . in the present state of human science it is impossible to reduce the emergence and the transformation of ideas to physical, chemical, or biological factors. It is this impossibility that constitutes the autonomy of the sciences of human action. Perhaps natural science will one day be in a position to describe the physical, chemical, and biological events in which the body of the man Newton necessarily and inevitably produced the theory of gravitation. . . . The sciences of human action by no means reject determinism. The objective of history is to bring out in full relief the factors that were operative in producing a definite event. History is entirely guided by the category of cause and event. In retrospect, there is no question of contingency. The notion of contin-

88. I*dem*.
89. Mises, *Theory and History*, p. 46.
90. Mises, *Ultimate Foundation*, p. 37. This is the language of the neo-orthodox Swiss theologian Karl Barth. Barth was a faithful disciple of Kant, as was Mises.
91. *Ibid*., p. 3.
92. Mises, *Epistemological Problems*, pp. 24, 57, 150.
93. *Ibid*., pp. 91, 204.
94. *Ibid*., p. 98.
95. Mises, *Theory and History*, p. 9.

> gency as employed in dealing with human action always refers to man's uncertainty about the future and the limitations of the specific historical understanding of future events.[96]

In principle, there is no contingency. All is determined, and natural science may fuse with human science to produce the society of total planning. It is only a question of gaining adequate knowledge.

There is a Kantian dualism between determinism and indeterminism. Man needs to preserve both his power and his freedom. "Free will means that man can aim at definite ends because he is familiar with some of the laws determining the flux of world affairs. There is a sphere within which each man *can* choose alternatives. He is not, like other animals, inevitably and irremediably subject to the operation of blind fate. He can, within definite limits, divert events from the course they would take if left alone."[97] *Man is therefore morally responsible*. The question is: To Whom? "Comparing himself with all other beings, man sees his own dignity and superiority in his will."[98] But Mises had already admitted that we do not know what the will is. It fills the gap between external causality and the rational categories of human thought. And man loses his freedom once that bridge is erected; men can control the responses of others once we know how the link is to be made. So, free will therefore means simultaneously that we cannot bridge that gap, that we cannot be controlled. Our so-called free will requires a determinate universe to hold off nature's blind fate, and it needs an indeterminate universe to hold off the controllers. Mises, as all post-Kantians, was impaled on the horns of the nature-freedom dilemma, also known as the personality-science dilemma. In short, it was Kant's dilemma.

Mises had no consistent theory of law, no link between mind and reality, other than "experience" and "will," both left undefined. Yet in his humanistic confidence he said of the natural sciences: "They provide the only mental tool that can be used in the ceaseless struggle for life. They have proved their practical worth. And no other way of knowledge is open to man, no alternative is left to him."[99] No alternatives, by *a priori* dictum—and this cannot be refuted by theology or facts. This is the closed universe

96. *Ibid*., p. 93.
97. *Ibid*., p. 179.
98. *Idem*.
99. *Ibid*., p. 305.

of nineteenth-century neo-Kantian rationalism. It is overconfident even in its all-encompassing contradictions.

E. Living With Dualism

Unlike Mises, Prof. Frank H. Knight (d. 1972) had a sense of the intellectual dualisms of secular thought. He was also a neo-Kantian. He separated the natural sciences from the human sciences in terms of epistemology, something that Paul Samuelson refused to do.[100] Social science must "strive to tell the whole truth, to recognize all the facts" in its quest for exhaustive knowledge.[101] Yet we are involved in an intellectual antinomy: the science ideal vs. the ideal of free human personality. "As far as science is concerned, free will, which is the only real dynamism, is either an illusion or simply a methodological limitation."[102] Free will is of very limited scope in life, he affirmed, in spite of the fact that it is "infinitely important." Here is the basic dilemma of all attempts at explaining social causation:

> There is equal insistence that causality is an active principle, and, on the other hand, upon concrete methods of problem-solving which are "scientific" in the sense of natural science as purely empirical, phenomenalistic, and positivistic. The main criticism of the book [R. M. Maclver's *Social Causation*] is that the author sees both horns of this intellectual dilemma but fails to recognize it and to see that it has no real solution.[103]

How do we link mind and external reality? Again, Knight admitted, there is no secular, rational solution.

> With regard to the relation between deduction and observation, or intelligence and the senses, in our knowledge of nature, there

100. Knight, *History and Method,* p. 121. Cf. Paul Samuelson, "Economic Theory and Mathematics—An Appraisal," *American Economic Review, Papers & Proceedings,* XLII (May 1952): "There are no separate methodological problems that face the social scientist different in kind from those that face any other scientist" (p. 61). This is the modem, post-Heisenberg viewpoint; Mises and Knight are clinging to Newtonian concepts of natural science.

101. Knight, p. 131.

102. *Ibid*., pp. 140–41.

103. *Ibid*., p. 137.

> is not much that should need to be said. Surely anyone who has made any progress at all in the study of philosophy, or even in private reflection about its problems, can be assumed to know that any simple antithesis between observation and inference is utterly untenable, if not downright foolish. The question as to the primary or immediate data of consciousness is perhaps the main perennial, unsolved and probably unsolvable problem of the theory of knowledge as a whole.[104]

Thus, since it cannot be solved, it is "downright foolish" to bring it up any longer, at least if the proposed antithesis is "simple." We must live with our inescapable intellectual contradictions.

Then how do we know the "facts" of economic scarcity or the idea of a "best" apportionment of scarce resources? We know "by living in the world 'with' other intelligent beings; we neither know them *a priori* nor by one-sided deduction from data and sense observation."[105] We know by "living." What kind of knowledge is economic knowledge? "Methodologically considered, economics is a highly abstract 'concrete deductive' science, similar to geometry or to mathematical mechanics; but in addition its data are intuitive in a far higher or purer sense than is true of mathematics itself."[106] We are back, once again, to *intuition.* Economists always get back to intuition.

Then how relevant are Friedman's categories of prediction? Not very, answered Knight. "A more fundamental weakness of inductive prediction in economics is that empirical (i.e., statistical) data never present anything like an exhaustive analysis of phenomenal sequences down to really elementary components, and the correlation of and extrapolation from composite magnitudes or series never can be very reliable."[107]

Theory or fact: where do we start? How do we string together the infinite number of hole-less beads with our infinitely long string of theory? Schumpeter simply concluded that we have to push very, very hard on the string: "It stands to reason that these two activities are not independent of one another but there must be an incessant give and take between them."[108]

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104. *Ibid.*, p. 159.
105. *Ibid.*, p. 164.
106. *Ibid.*, p. 168.
107. *Ibid.*, p. 176n.
108. Schumpeter, *History of Economic Analysis*, p. 45.

In short, "there is not and there cannot be any fundamental opposition between 'theory' and 'fact finding,' let alone between deduction and induction."[109] Then why the endless battles between inductivists and deductivists? And how can you solve the problem of fitting facts with the proper theories if you deny that the problem even exists?

Alfred Marshall, the influential nineteenth-century Cambridge economist, wrote that an economist "needs the three great intellectual faculties, perception, imagination and reason: and most of all he needs imagination."[110] He is echoed by Kenneth Boulding: "Decision making by instinct, gossip, visceral feeling, and political savvy may stand pretty low on the scale of total rationality, but it may have the virtue of being able to take in very large systems in a crude and vague way, whereas the rationalized processes can only take subsystems in their more exact fashion, and being rational about subsystems may be worse than being not very rational about the system as a whole."[111] Finally, we have the testimony of Michael Arbib.

> Any science that supposedly captures reality in two or three equations is inadequate to describe the systems formed by both brain and society—systems with billions of variables. Thus it would seem that, given the incomplete state of our formal theories, we must complement them with our everyday knowledge as members of society. In short, our rational analysis of society must strike a balance between precise description of certain subsystems and, quite frankly, intuition and feeling about other problems.[112]

Modern man has no epistemology. He wants to stand on balanced ground, but where is balance to be found? What are the criteria of true balance? How does one apply these criteria to the data of the external world? How does one go about proving the existence of such criteria of balance?

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109. *Idem*.

110. Alfred Marshall, quoted by Vincent W. Bladen, "John Stuart Mill's *Principles:* A Centenary Estimate," *American Economic Review, Papers & Proceedings,* XXXIX (May 1949), pp. 4–5

111. Kenneth Boulding, "The Economics of Knowledge and the Knowledge of Economics," *ibid., Papers & Proceedings,* LVI (May 1966), p. 11.

112. Michael Arbib, "Complex Systems: The Case for a Marriage of Science and Intuition," *The American Scholar,* XLII (Winter 1972–73), p. 53. Arbib was a professor of computer science at the Massachusetts Institute of Technology.

The whole epistemology of modern man collapses into intuition, feeling, and endless measurement of increasingly useless minute data.

Knight argued that one thing that scientists need is *a sense of corporate honor*. "Without a sense of honor (as well as special competence) among scientists—if, say, they were all charlatans—there could be no science."[113] To support the superstructure of rational science we have to have honesty—indeed, honor, an essentially feudal, military concept. Science rests on ethics. Can ethics be neutral? If not, value-free science rests on value-laden assumptions about man, honesty, and fairness. Economic science is not and cannot be autonomous. It therefore cannot be rational. It is intuitional and ethics-oriented. Its secular neutrality is a sham.

Epistemologically, there is simply no legitimate way open for post-Kantian economists to defend their affirmation of neutrality. Neutrality implies a fixed, straightforward, universally recognized link between the external world and the logic of the human mind. But it is this link that is both affirmed and denied by modern philosophers of the social sciences. By appealing to intuition again and again in order to fill the gap between mind and matter, the modern social scientist must abandon his confidence in neutrality. The noumenal realm of will, feeling, intuition, or experience is nonrational, by definition. Kantians can say nothing about its operations.

What goes on in the noumenal realm is closed to pure reason, that is, the logical and mathematical reasoning of phenomenal science. All is mystery in Kant's noumenal realm, as Richard Kroner has shown so well in his book, *Kant's Weltanschauung* (1914). Logical neutrality implies a fixity of reference, and the noumenal realm is a zone of pure contingency—total chaos, as far as logic can determine. It is the realm of Kant's God, Kant's ethics, and Kant's "things in themselves." Once washed in the chaos of intuition, neutrality emerges as a myth. The determinacy of logic erodes in the acid sea of chance.

There is absolutely no likelihood that the *a priori* approach of Prof. Mises and the *a posteriori* approach of Prof. Friedman will ever be reconciled, in spite of the fact that each approach ultimately appeals to the irrational and the intuitive in the crucial task of uniting the laws of thought and the world beyond. From Parmenides and Heraclitus to Mises and Friedman, the basic opposition has in no meaningful way been bridged, despite the stupendous effort of intellectuals to overcome it. Nevertheless, on the most fundamental

113. Knight, p. 157.

of all issues, Parmenides and Heraclitus could join hands, just as Mises and Friedman did: the issue of human autonomy. Van Til put it quite well:

> It is not the differences between them but that fact that all of them, whatever their differences, have in common the assumption of human autonomy that is basic to an understanding even of their internal differences. I do not speak of the *autonomy of theoretical thought* but of the *pretended* autonomy of apostate *man.* It is this and, as it appears to me, basically *only* this which all schools of apostate thought have in common. Assuming this autonomy apostate man gives *a* rebellious covenant-breaking response to the revelational challenge that he meets at every turn. The face of the triune God of Scripture confronts him everywhere and all the time. He spends the entire energy of his whole personality in order to escape seeing this face of God.[114]

Conclusion

The Bible tells us what mankind is apart from grace: blind, rebellious in need of salvation, perverse. Every man requires limits on his thought processes—*balance*, to use Arbib's concept—and this means authoritative revelation. He is unable to find such a balance on his own. He needs biblical law to help him construct social and economic institutions, each with its proper legitimate sphere of authority. Men are not autonomous, and by claiming full autonomy, they hurl themselves into the intellectual void of intuition. The faith of the secular economist in the full autonomy of the discipline is a shaky faith indeed.

This should not give comfort to the pietist or the Barthian who is antinomian to the core anyway. There are far too many of both groups who are unwilling to discover the common grace (or restraining grace)[115] of secular economists like Mises, Friedman, or Knight. Brushing off their scholarship with a brief comment like the following gets us nowhere: "They're just secu-

114. Cornelius Van Til, "Response" to Herman Dooyeweerd, in E. R. Geehan (ed.), *Jerusalem and Athens* (Nutley, New Jersry: Presbyterian & Reformed, 1971), pp. 96–97.

115. Gary North, *Dominion and Common Grace* (Tyler, Texas: Institute for Christian Economics, 1987).

larists, so they have nothing to teach us, so we can adopt guild socialism that is neither intelligent nor revealed in the Bible, but we like it because it sounds radically Christian!"

There is no social hope in an antinomian retreat into the vague socialism of the German Historical School or other anti-theoretical economics systems. Where Mises and Friedman say things that are in conformity to the Bible, we should take their careful expositions seriously. We have the responsibility of recognizing what is and what is not in conformity to the Bible's concrete revelation whenever we read the works of secular economists. Abandoning reason in the name of vague "Christian feelings of charity" is no substitute for prayerful scholarship into the implications of our acts. Christian reconstruction will not be the result of pietistic singing about the joy, joy, joy, joy down in the heart, nor will it be the result of endless affirmations of empty Dooyeweerdian spheres. It will be the result of the concrete application of biblical law in the external spheres of life and the application of sovereign grace in the hearts of men. Antinomianism, whatever its form, leads to cultural impotence. Because the secular economist has no epistemological cloak does not, in and of itself, clothe the Christian in robes of purple. The Christian has to make his own clothing.

In order to make myself perfectly clear, as President Nixon used to say, let me spell out precisely what I mean. The slogan of too many Christians has been "no creed but the Bible, no law but love." Another is the familiar "we're under grace, not law." This is pure antinomianism. It makes Christianity utterly impotent to challenge the scholarship of the secularists. It makes it impossible to construct intellectual or institutional alternatives to the various secular systems. We are not under the curse of law, but we are under its limitations for our external conduct, including social conduct. The *progressive sanctification* of the Christian—fighting the good fight, pressing on to the mark for the prize of God's high calling (Philippians 3:14)—is in terms of law. If a Christian is an economist, then his own progressive sanctification must be in terms of the Bible's revelation concerning both the theory and facts of economic thought. The "mind-matter" link is there, because he is made in the image of God, and God comprehends His own creation. The rebellion of Adam made God's verbal revelation necessary in order to restrain man's apostate thought, including economic thought. Without the Bible and its concrete economic instruction, the "mind-matter" link will inevitably be warped; the theories

of economics, as well as the facts selected in terms of these theories, will be in error, sooner or later.

[This is a slightly revised version of my essay with the same name, which was published in Gary North (ed.), *Foundations of Christian Scholarship: Essays in the Van Til Perspective* (Vallecito, CA: Ross House, 1976).]

Appendix B

THE HEAT DEATH OF THE UNIVERSE

Physics tells the same story as astronomy. For, independently of all astronomical considerations, the general physical principle known as the second law of thermo-dynamics predicts that there can be but one end to the universe—"heat-death" in which the total energy of the universe is uniformly distributed, and all the substance of the universe is at the same temperature. This temperature will be so low as to make life impossible. It matters little by what particular road this final state is reached; all roads lead to Rome, and the end of the journey cannot be other than universal death.

Sir James Jeans[1]

What I argue in this chapter is simple enough: the second law of thermodynamics has become an important intellectual foundation justifying radical pessimism. Those intellectuals and natural scientists who are in the habit of drawing social and philosophical conclusions from natural science have been unable to escape the pessimistic implications of the second law. This growing pessimism now threatens Western civilization.

Admittedly, those scientists who devise grand cosmological schemes are always a minority in the profession. Obviously, most scientists are specialists who spend their lives doing very carefully circumscribed experiments in laboratories. They are seldom called upon to make pronouncements concerning the meaning of life or the long-term implications of their implicit worldview. The prominent astronomer Edwin Hubble recognized that scientists are not normally called into the public arena to set forth grand principles and schemes, but he insisted that on major questions (such as nuclear war), they must begin to speak out. They can no longer legitimately hide in the shadows of their laboratories. "Scientists in general are

1. James Jeans, *The Mysterious Universe* (New York: Macmillan, 1944), p. 15. Jeans was one of the world's most famous astronomers during the first half of the twentieth century.

not very articulate; they work in comparative seclusion and they do not cultivate the art of persuasion. But now a new era has emerged, and reticence is no longer a virtue."[2]

Hubble understood that scientists' efforts have had major consequences outside the laboratory. Science is more than a game or a curiosity; it is one of the major religions of modern life. People rely on scientists. Science has produced more and better consumer products, as well as more and better weapons. Science has "delivered the goods." People are going to pay attention to any technique or way of looking at the world which has affected their lives to the extent that modern science has. Thus, when a scientist speaks authoritatively in the name of science, many people will listen, especially nonscientific intellectuals, at least if he speaks in a language even remotely like the vernacular.

Three Religious Worldviews

There are three major outlooks that prevail today. They are ancient rivals. The debate among the various proponents of these outlooks has effects in the consideration of entropy and its social, economic, and political implications.[3] Jeremy Rifkin and most Scientific Creationists represent the second outlook.

1. Power Religion

This is a religious viewpoint which affirms that the most important goal for a man, group, or species, is the capture and maintenance of power. Power is seen as the chief attribute of God, or if the religion is officially atheistic, then the chief attribute of man. This perspective is a satanic perversion of God's command to man to exercise dominion over all the creation (Gen. 1:26–28).[4] It is the attempt to exercise dominion apart from covenantal subordination to the true Creator God.

What distinguishes biblical *dominion religion* from satanic *power religion* is ethics. Is the person who seeks power doing so primarily for the

2. Edwin Hubble, *The Nature of Science and Other Lectures* (San Marino, California: Huntington Library, 1954), p. 3.

3. The following section on the three types of religious thought is included in several of my books. It is clearly basic to my understanding of how men think about the role of man in this world.

4. Gary North, *The Dominion Covenant: Genesis* (2nd ed.; Tyler, Texas: Institute for Christian Economics, 1987).

glory of God, and secondarily for himself, and only to the extent that he is God's lawful and covenantally faithful representative? If so, he will act in terms of God's ethical standards and in terms of a profession of faith in God. The church has recognized this two-fold requirement historically, and has established a dual requirement for membership: profession of faith and a godly life.

In contrast, power religion is a religion of *autonomy*. It affirms that "My power and the might of mine hand hath gotten me this wealth" (Deuteronomy 8:17). It seeks power or wealth in order to make credible this very claim.

Wealth and power are aspects of both religions. Wealth and power are covenantal manifestations of the success of rival religious views. This is why God warns His people not to believe that their autonomous actions gained them their blessings: "But thou shalt remember the LORD thy God: for it is he that giveth thee power to get wealth, that he may establish his covenant which he sware unto thy fathers, as it is this day" (Deuteronomy 8:18). It must be recognized that God's opponents also want visible confirmation of the validity of their covenant with death, but God warns them that "the wealth of the sinner is laid up for the just" (Proverbs 13:22b). The entry of the Hebrews into Canaan was supposed to remind them of this fact: the Canaanites had built homes and vineyards to no avail; their enemies, the Hebrews, inherited them (Joshua 24:13).

Those who believe in power religion have refused to see that long term wealth in any society is the product of ethical conformity to God's law. They have sought the blessings of God's covenant while denying the validity and eternally binding ethical standards of that covenant. In short, they have confused the fruits of Christianity with the roots. They have attempted to chop away the roots but preserve the fruits.

2. Escapist Religion

This is the second great tradition of anti-Christian religion. See ing that the exercise of autonomous power is a snare and a delusion, the proponents of escapist religion have sought to insulate themselves from the general culture—a culture maintained by power. They have fled the responsibilities of worldwide dominion, or even regional dominion, in the hope that God will excuse them from the general dominion covenant.

The Christian version of the escapist religion is sometimes called "pi-

etism," but its theological roots can be traced back to the ancient heresy of *mysticism.* Rather than proclaiming the requirement of *ethical union* with Jesus Christ, the perfect man, the mystic calls for *metaphysical union* with a monistic, unified god. In the early church, there were many types of mysticism, but the most feared rival religion which continually infiltrated the church was *gnosticism.* It proclaimed many doctrines, but the essence of gnostic faith was radical individualism. It involved a self-conscious retreat from the material realm and escape to a higher, purer, spiritual realm through techniques of self-manipulation: asceticism, higher consciousness, and initiation into secret mysteries. Gnosticism survives as a way of thinking and acting (or failing to act) even today, as R. J. Rushdoony has pointed out. The essence of this faith is its *antinomianism*—anti (against) nomos (law). Gnostics despise the law of God. But their hatred for the law of God leads them to accept the laws of the state.

Rushdoony has commented on the persistence of gnosticism throughout Western history right up to the present. A major feature of gnosticism is the gnostics' contempt for time, their unwillingness to try to change external events. Their exclusive concern was salvation of the individual and escape from the external world. In some cases, they even had contempt for the material world, as well as for morality, as Rushdoony notes:

> Gnosticism survives today in theosophy, Jewish Kabbalism, occultism, existentialism, masonry, and like faiths. Because Gnosticism made the individual, rather than a dualism of mind and matter, ultimate, it was essentially hostile to morality and law, requiring often that believers live beyond good and evil by denying the validity of all moral law. Gnostic groups which did not openly avow such doctrines affirmed an ethic of love as against law, negating law and morality in terms of the "higher" law and morality of love. Their contempt of law and of time manifested itself also by a willingness to comply with the state. . . . The usual attitude was one of contempt for the material world, which included the state, and an outward compliance and indifference. A philosophy calling for an escape from time is not likely to involve itself in the battles of time.[5]

5. Rousas John Rushdoony, *The One and the Many: Studies in the Philosophy of Order and Ultimacy* (Fairfax, Virginia: Thoburn Press, [1971] 1978), p. 129.

The basic idea lying behind escapist religion is the denial of the dominion covenant. The escape religionist believes that the techniques of self-discipline, whether under God or apart from God (Buddhism), offer power over only limited areas of life. They attempt to conserve their power by focusing their ethical concern on progressively (regressively) narrower areas of personal responsibility. The "true believer" thinks that he will gain more control over himself and his narrow environment by restricting his self-imposed zones of responsibility. His concern is self, from start to finish; his attempt to escape from responsibilities beyond the narrow confines of self is a program for gaining power over self. It is a religion of works, of *self salvation.* A man "humbles" himself—admits that there are limits to his power, and therefore limits to the range of his responsibilities—only to elevate self to a position of hypothetically God-like spirituality.

Escapist religion proclaims institutional peace—"peace at any price." Ezekiel responded to such an assertion in the name of God: ". . . they have seduced my people, saying, Peace; and there was no peace" (Ezek. 13:10a). Patrick Henry's inflammatory words in 1775 were taken from Jeremiah: "They have healed also the hurt of the daughter of my people slightly, saying, Peace, peace; when there is no peace" (Jer. 6:14). This rival religion proclaims peace because it has little interest in the systematic efforts that are always required to purify institutions as a prelude to social reconstruction.

In short, escapist religion calls for flight from the world, and because man is in this world, it calls for *a flight from humanity.*[6] Its advocates may hide their real concern—the systematic abandonment of a world supposedly so corrupt that nothing can be done to over come widespread cultural evil—by appealing to their moral responsibility of "sharing Christ to the world" or "building up the Church" rather than rebuilding civilization, but their ultimate concern is *personal flight from responsibility.* It is a revolt against maturity.[7]

3. Dominion Religion

This is the orthodox Christian faith. It proclaims the sovereignty of God, the reliability of the historic creeds, the necessity of standing up for

6. R. J. Rushdoony, *The Flight from Humanity: A Study of the Effect of Neoplatonism on Christianity* (Fairfax, Virginia: Thoburn Press, [1973] 1978).

7. R. J. Rushdoony, *Revolt Against Maturity: A Biblical Psychology of Man* (Fairfax, Virginia: Thoburn Press, 1977).

principle, and the requirement that faithful men take risks for God's sake. It proclaims that through the exercise of saving faith, and through ethical conformity to God's revealed law, regenerate men will increase the extent of their dominion over the earth. It is a religion of conquest—*conquest through ethics.* The goal is ethical conformity to God, but the results of this conformity involve dominion—over lawful subordinates, over ethical rebels, and over nature. This is the message of Deuteronomy 28:1–14. It is also the message of Jesus Christ, who walked perfectly in God's statutes and in God's Spirit, and who then was granted total power over all creation by the Father (Matt. 28:18). I am not speaking here of Christ as the Second Person of the Trinity, who always had total power; I am speaking of the Incarnated Christ, who as the perfect man *gained* total power through ethical conformity to God and through His death and resurrection.

Dominion religion recognizes the relationship between *righteousness* and *authority,* between covenantal faithfulness and covenantal blessings. Those who are faithful in little things are given more. This is the meaning of Christ's parable of the talents. The process of dominion is a function of *progressive sanctification,* both personal-individual and institutional (family, church, business, school, civil government, etc.: Deuteronomy 28:1–14).

Covenantal religion is always *openly, forthrightly creedal;* it has a public theology. Power religion and escapist religion may or may not be openly creedal. Nevertheless, every worldview has a creed, even if that permanent creed states only that "there is no valid creed." *Creeds are inescapable concepts.* It is never a question of "creed vs. no creed"; it is a question of *which* creed.[8] We must understand, how ever, that power religion seldom announces itself as an inescapably creedal religion, although Communism and Nazism have been exceptions to this general rule. In the historic environment of the "liberal" West, power religion's advocates have seldom announced their intentions openly until the final phases of their capture of institutional power.

In contrast to covenantal, creedal religion is gnosticism, both old and new. Rushdoony has pointed out that gnosticism has generally been hostile to creeds. "Creeds too obviously revealed its departure from and hostility to the faith. It was much more effective to affirm the Apostles' Creed, and then

8. R. J. Rushdoony, *Foundations of Social Order* (Fairfax, Virginia: Thoburn Press, [1968] 1978), pp. 1–2. Cf. Rushdoony, *Infallibility: An Inescapable Concept* (Vallecito, California: Ross House, 1978).

reinterpret it in terms of Gnosticism. This, from Gnosticism on through neo-orthodoxy, has been a favored method of heresy." Gnosticism is a rival religion. Rushdoony continues: "Gnosticism was in essence *humanism,* the glorification of man. In humanism, man makes himself ultimate by undercutting the ultimacy of God. The vaguer the doctrines of the Father, Son, and Holy Ghost were made, the more clearly man emerged as the sovereign, and man's order as the ultimate order."[9]

Religious Worldviews Govern Scientific Interpretation

These three outlooks still divide men. In this book, I primarily deal with two rival versions of the escapist religion, and then I offer an alternative, the dominion (ethics) religion. I operate with this presupposition: men are either self-consciously under God and over nature, or else they are self-consciously in rebellion against God and under nature.

The modern power religionist wants to place most men under the control of a scientific elite (which is a part of nature),[10] while the humanist escapist religionist (very often a mystic) wants to see all men living in harmony with nature and each other without the element of human power anywhere in the society. The history of man can be understood in terms of the increasing epistemological and ethical self-consciousness of man. Therefore, in our day the conflict between these two worldviews—power vs. escape—has become sharper and less easily deferred.

Historically, Christianity has been influenced by all three outlooks: power religion, dominion religion, and escape religion. The medieval quest for power over civil government by the institutional church was in part an aspect of power religion. In reaction, European pietism—the Mennonites and Amish—have been characterized by their withdrawal from politics and culture: escape religion. These two isolated pietist groups have also been pacifist in outlook.

Mainstream Christian escapists (pietists, mystics) want only to defer the "power vs. escape" confrontation until Jesus comes back again and solves it by means of His power. This theology of deferral has become visibly bankrupt in the 1980s. Christians of all eschatological views have begun to abandon it, some more consistently than others.

The power religion in our day is humanistic elitism (including Commu-

9. Rushdoony, *Foundations of Social Order*, p. 11.
10. C. S. Lewis, *The Abolition of Man* (New York: Macmillan, [1947] 1969), ch. 3.

nism), which has as its goal autonomous man's conquest of nature (including mankind). It often misuses the intellectual discipline of science in this effort. It is opposed by the escapist religion, as well as by the ethics-based dominion religion. The two forms of the escapist religion that are most prominent in the United States today are modern Christian pietism and some (though not all) forms of the New Age movement—the bliss-seeking mystics and miracle-seeking magicians,[11] not the political activists.[12] Implicitly, both are opposed to the idea that legitimate long-term progress is possible prior to the coming of Christ in power (fundamentalism) or the coming of "Christ-consciousness" within humanity (New Age).

Christian Reconstruction offers as an alternative a dominion concept of long-term scientific, economic, and intellectual progress which can overcome most (though not all) of the limits placed by God on His creation as aspects of His curse. It offers hope through covenantal faithfulness to God's law.[13]

Nick Herbert argues that the scientific community's view of reality eventually seeps out and down to the common man. This view of physical reality will eventually influence the way we view social and political reality. "For better or worse, humans have tended to pattern their domestic, social, and political arrangements according to the dominant vision of physical reality. Inevitably the cosmic view trickles down to the most mundane details of everyday life."[14] I would argue, on the contrary, that this is what scientists prefer to believe, but that the reality is far different: *the dominant religious worldview establishes what cosmic vision is acceptable for scientists to believe.* There is always interaction, but the primary motivation comes from the pulpit, the "old boy network," the newspaper staff assignment room, and Party headquarters, not the laboratory.

It is Jeremy Rifkin's tactic to pretend that Herbert's view is correct, that what scientists believe about the universe will soon reshape our social and

11. Gary North, *Unholy Spirits: Occultism and New Age Humanism* (Ft. Worth, Texas: Dominion Press, 1986), chaps. 4, 6, 7.

12. *Ibid.*, ch. 10.

13. Gary North, *Dominion and Common Grace: The Biblical Basis of Progress* (Tyler, Texas: Institute for Christian Economics, 1987); Ray R. Sutton, *That You May Prosper: Dominion By Covenant* (Tyler, Texas: Institute for Christian Economics, 1987).

14. Nick Herbert, *Quantum Reality: Beyond the New Physics* (Garden City, New York: Anchor Press/Doubleday, 1985), p. xi.

political world. He is a dedicated propagandist, and he seeks to cover his implicitly political program with a scientist's white smock.

Pessimism

What I argue in this appendix is that some (though not all) members of both the Scientific Creation movement and the more mystical proponents of the New Age movement have promoted an *explicit pessimism* concerning human progress. New Age mystics conceal this pessimism because they usually focus on short-term evolutionary "leaps of being." But one man, Jeremy Rifkin**,** is quite open in his presentation of the case for "entropic pessimism," and I focus on his arguments in this book.

I also argue that modern rationalistic, humanistic power-seekers and profit-seekers also ultimately share in this pessimism, but their innate pessimism is suppressed because of their faith in either scientific planning or free market productivity. The power religionists have no long-term cosmological hope, and the more consistent ones admit this. The Christian escapist religionists profess no short-term cosmological hope, and they appeal only to the long-term hope of cosmological redemption and total transformation. The New Age mystics have no long-term hope, not much short-term hope, and refuse to admit either.

Rifkin has argued that our view of nature gives us our sense of meaning. When we search for understanding concerning our personal final end, we turn to nature. "The fact is, we human beings cannot live without some agreed-upon idea of what nature and life are all about. When we ponder what our own personal fate might be after the last breath of life is extracted, or when we try to imagine what existed before existence itself, we are likely to become paralyzed with doubt. Our concept of nature allows us to overcome these ultimate anxieties. It provides us with some of the answers, enough to get along. A concept of nature, then, is more than just an explanation of how living things interact with one another. It also serves as a reference point for deciphering the meaning of existence itself."[15]

What I argue is exactly the opposite: *our view of our final end is what gives us our view of nature.* Despite his long-winded critique of modern natural science, especially Darwinism, Rifkin assumes the Darwinian time scale and the Darwinian theory of origins. He assumes a vision of "last

15. Jeremy Rifkin and Nicanor Perlas, *Algeny: A New Word—A New World* (New York: Viking, 1983), p. 28.

things" (eschatology) which he claims is provided by modern science. What he does not mention is that this view of mod ern science was derived from men who had a religious impulse: *to escape God's final judgment*.[16]

The Textbook Version of Thermodynamics

What have scientists said about the second law of thermodynamics? They have said a great deal, but most of what they have said is confined to textbooks, with scholarly articles thrown in as an extra bonus. The standard thermodynamics textbook is filled with elegant mathematical equations and suggested experiments. The authors of these college-level textbooks seldom digress into discussions of the cosmic implications of the science of thermodynamics. They just present the technical material, usually with in the context of mechanical engineering or statistical mechanics. Here is a standard description of the second law of thermodynamics:

> When a system containing a large number of particles is left to itself, it assumes a state with maximum entropy, that is, it becomes as disordered as possible.[17]

We must understand that this disordered state—"maximum entropy"—is always structured by certain fixed limits. It is randomness within an ordered physical environment.

Another textbook statement is important because it presents the view of the second law that Jeremy Rifkin accepts as the agreed upon foundation of Western science. What I will argue later in this book is that *Rifkin has not misled us with respect to what physical scientists have taught,* but he has misapplied a fundamental doctrine of science. Here is the definition:

> Closely associated with the concept of changes in entropy is **the second law of thermodynamics.** One statement of the second law is: *The total amount of entropy in nature is increasing.* Although we can pick out many natural processes that may involve increases in the degree of ordering (for example, the precipitation of salts in salt lakes or the growth of living organisms), other processes are taking place that decrease the order of nature (for ex-

16. Gary North, *The Dominion Covenant: Genesis,* pp. 375–86.
17. K. R. Atkins, *Physics* (New York: Wiley, 1966), p. 206.

> ample, the evaporation of water or the decay of organisms). The overall effects of the latter processes appear greater than of the former in the part of the universe we observe.
>
> Another way in which the second law is stated is: *In any spontaneous change the amount of free energy available decreases.* This is one way of saying that natural processes go downhill. A familiar example of the second law is that heat cannot pass from a colder to a hotter body without the action of some external agency.[18] (Emphases in original.)

The authors have covered their academic backsides with the qualification, "in the part of the universe we observe." They do not explicitly argue that for every local decrease in disorder (decrease in entropy) there must be an even greater increase in disorder *for the universe as a whole.* They just state that in any part of the universe we observe, this is what we find. Rifkin universalizes the process; so, for that matter, do most other scientists. They have done so ever since Rudolph Clausius first formulated the second law in 1850.

A textbook account informs the student that when a gas is in equilibrium, with its molecules randomly bouncing against the walls of a container—a container through which energy does not flow (a hypothetical condition that is never achieved in the real world)[19]—the experimenter can draw some rigorously scientific conclusions. The second law officially applies only to this hypothetical *and impossible* condition: a perfectly closed system in equilibrium. This is why the main branch of the science of thermodynamics is called *equilibrium* thermodynamics. This is the thermodynamics of the textbooks.

A gas is capable of producing work under certain conditions, meaning that it can lift a weight or move an object in a particular direction or heat a room. To get a container of gas that is in equilibrium to do this, a spark or some other external catalyst is introduced. This destroys the original equilibrium condition of the gas. After this energy-releasing change has taken

18. Charles W. Keenan and Jesse H. Wood, *General College Chemistry* (3rd ed.; New York: Harper & Row, 1966), p. 420.

19. The technical term for such a container is an adiabatic wall. On the useful ness of the concept, despite the fact that such a condition is impossible to achieve, see Don C. Kelly, *Thermodynamics and Statistical Physics* (New York: Academic Press, 1973), p. 6.

place, the new equilibrium condition of the gas or its resulting chemical products will be capable of less work. While scientists can state this principle of physics in many different ways, this is the meaning of the second law of thermo dynamics.

This law was discovered early in the nineteenth century as a result of observations of pumps. It was observed that heat transfers only in one direction: from a warmer object to a cooler object. This heat transfer can perform work, but once performed, the heat will not flow from the cooler object back to the warmer object, so the work cannot be done again. In short, there is *directionality in heat loss.*

Consider a textbook example of a weight suspended by a rope on a pulley. The man holding the other end of the rope grows tired, and he lets go of the rope. The weight drops to the floor, and its impact briefly spreads heat (speeded-up molecules) throughout the floor. The weight is now sitting on the floor. A constant temperature for the weight, air, and floor is achieved when the overall temperature is in equilibrium—a condition of *randomness,* meaning a random distribution of heat within the confines of the room.

If the temperature of the room, floor, and weight is now in equilibrium, the second law of thermodynamics states that the weight will not suddenly rise to the ceiling because of the energy supplied by the room, with the room somehow spontaneously growing colder, and with the decrease in room heat taking the form of a gust of wind that suddenly lifts the weight, warming it in the process.[20] In short, heat is spontaneously transferred only from the warmer object to the cooler. "Henry A. Bent, a chemist at the University of Minnesota, has made calculations which show that it is *more likely* for a tribe of wild monkeys, punching randomly on a set of typewriters, to turn out Shakespeare's complete works fifteen quadrillion times in succession without error than is the conversion at room temperature of one calorie of thermal energy to work."[21]

So far, the second law of thermodynamics does not appear to be the foundation of a new worldview. But it is. It is the foundation of a powerful,

20. Cf. Stanley W. Angrist and Loren G. Helper, *Order and Chaos: Laws of Energy and Entropy* (New York: Basic Books, 1967), pp. 149–50.

21. *Ibid.,* pp. 150–51. I think Prof. Bent invented this off the top of his head; in reading his comment in the original, I find no discussion of his actual calculations. But it does give the reader some indication of just how universal in scope scientists believe the second law of thermodynamics to be. See Harry A. Bent, *The Second Law* (New York: Oxford University Press, 1965).

intellectually compelling worldview, one which is radically pessimistic.

The Heat Death of the Universe

If heat is transferred only from the warmer to the cooler, then eventually the temperature of the universe will be equalized, *if the universe is a closed system.* Virtually all modern scientists operate on the assumption that it is a closed system, although they cannot prove this.[22] When the temperature of all objects at last is equal, no more work will be possible. This, in fact, is the scientific definition of "at last." It is the modern scientific definition of the end of time. Heat flows one way only. When the fires of the suns of the universe have been extinguished, and no more heat energy flows into the "cosmic heat sink" of space, the randomness of bouncing molecules will then overwhelm every sense of directionality in the universe. Time will end, for time is directional. This is the legendary future condition called the heat death of the universe.

We now have gone from tightly defined laboratory experiments to a theory of the extinction of the universe. Is this intellectual jump legitimate? The non-scientist intuitively accepts the jump, but this may be because he has been told endlessly by scientists that it is not only legitimate, it is inescapable. If heat really goes from warmer to cooler, then eventually everything in the universe will be at the same temperature. Work will then cease. This seems to follow from the initial statement of the second law, even though the second law *officially* applies *only* to closed systems in equilibrium. The layman accepts this conceptual leap, for he assumes that the universe is a closed system which is headed for equilibrium, meaning a world of random, directionless, and therefore timeless change. But is the layman's understanding

22. "The only candidate for a truly isolated system is the universe." Kelly, *Thermodynamics and Statistical Physics*, p. 5. "The universe is certainly isolated. . . ." *Ibid*., p. 120. "Conceiving the universe as an isolated system, we may then say. . . ." Leonard K. Nash, *Elements of Classical and Statistical Thermodynamics* (Reading, Massachusetts: Addison-Wesley, 1970), p. 74. "Since the entire universe is itself an isolated system and therefore cannot exchange energy and matter with any outside system (by definition of the universe there can be nothing outside it), the second law of thermodynamics applies to it." Lloyd Motz, *The Universe: Its Beginning and End* (New York: Scribner's, 1975), pp. 305–6. "Indeed, we cannot be certain that we are dealing with a truly closed system unless we take for our system nothing less than the entire universe." Isaac Asimov, *Understanding Physics: Motion, Sound, and Heat* (New York: New American Library, 1966), p. 233.

correct? Have serious, competent scientists in the field of thermodynamics made this leap of faith? The answer is yes. In fact, one of the founders of thermodynamics came to this conclusion in 1865: Rudolph Clausius.

Clausius' Theory

Rudolph Clausius formulated an early statement of the second law in 1850, and he specifically called it the second law of thermodynamics.[23] He also invented the word *entropy*.[24] He argued that whenever there is a closed system, it is either in a random equilibrium state, or else it becomes increasingly random. He called this equilibrium state *entropy.* Entropy is therefore a *characteristic* of a physical system. The lower the entropy of a closed system, the greater the order. A textbook puts Clausius' law in bold face: **"The entropy of an isolated system never decreases.** This statement is generally referred to as the *entropy principle."*[25] Another physicist states that **"the entropy of a closed system tends to remain constant or to in crease."**[26] In short, the road to universal randomness is a one-way street.

Maybe. Why maybe? Because of the outside possibility that at some point in the future, the universe may begin to contract. That would decrease entropy by decreasing the number of possible states for matter. Like a collection of marbles in a shrinking box, the number of different locations possible for any given marble would be reduced. The system as a whole would become less random. Thus, a cautious physicist writes: "Fifty years ago it was common to say that the entropy of the universe is increasing, which may very well be true. This is a cosmological question. The 'Big Bang' models of the expansion of the universe imply an increase in the entropy at the present epoch. If the universe contracts at a later epoch, the entropy will probably decrease."[27] Popular writer (and chemist) Isaac Asimov warns: "On the basis of our observations and experiments we can say exactly nothing about the relationship between entropy and a contracting universe."[28] We are free to suppose that entropy will decrease during contraction, he says; but this implies that we are equally free to suppose that it does not.

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23. Isaac Asimov, *Understanding Physics: Motion, Sound, and Heat*, p. 230.
24. *Ibid*., p. 231.
25. Kelly, *Thermodynamics and Statistical Physics*, p. 119.
26. Charles Kittel, *Thermal Physics* (New York: Wiley, 1969), p. 61.
27. *Ibid*., p. 65.
28. Isaac Asimov, *A Choice of Catastrophes: The Disasters That Threaten Our World* (New York: Simon & Schuster, 1979), p. 57.

In any case, today it seems unlikely that there is sufficient matter in the universe to enable it to contract in the future. But why does it matter what happens to matter? Asimov speculates that if the contraction takes place, it may take 500 billion years for the universe to "come to a halt about halfway to heat death," and then another 500 billion years to the creation of a new compressed cosmic egg.[29] Who cares? Yet even in a textbook, a scientist thinks that men (including scientists) *do* care: "Life in a forever expanding universe seems less attractive than in one which is 'closed.' For this and other (less psychologically motivated) reasons, astronomers are still looking for additional matter in the vast expanses of the universe."[30]

It's About Time

The reason why people care what happens to the universe is difficult to explain, but I think it is closely related to *the psychic need in man for eternal life.* If man's work survives, then a part of man survives. Like the schoolboy who carves his initials on a desk, like the juvenile delinquent who spray paints his first name on a wall, and like authors who write books, the scientist wants to leave traces that his work is not in vain. "History will judge," a man believes. But what if history dies? Who or what will then judge man? A sovereign God? That thought is just not acceptable. Something more *impersonal* is sought after by rebellious man to serve as cosmic judge. That impersonal cosmic judge is time. But if the increase in entropy is time's arrow, then what happens to time if entropy finally reaches its theoretical limit in cosmic randomness? The judge dies.

Judgment is intimately bound up with the question of *meaning.* The British humanist and mathematician-philosopher Bertrand Russell put it this way in 1903: ". . . all the labours of the ages, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction in the vast death of the solar system, and that the whole temple of Man's achievement must inevitably be buried beneath the debris of a universe in ruins—all these things, if not quite beyond dispute, are yet so nearly certain, that no philosophy which rejects them can hope to stand. Only with in the scaffolding of these truths, only on the firm foundation of un yielding despair, can the soul's habitation henceforth be safely built."[31] Man-

29. *Ibid.*, p. 59.
30. Kelly, *Thermodynamics and Statistical Physics*, p. 122.
31. Bertrand Russell, "A Free Man's Religion" (1903), in *Mysticism and Logic*

kind has only a firm foundation of ultimate despair to build upon. Heat death will snuff out all his efforts and all his selfgenerated, autonomous meaning.

This was Clausius' legacy. He was the first to argue for the inevitable heat death of the universe. Few scientists have dared to challenge him; instead, they generally ignore the issue. They write textbooks that judiciously avoid raising it. Another great physicist, Ludwig Boltzmann, who eventually did challenge Clausius' theory, initially refused to disagree with him in public. Boltzmann addressed Austria's Imperial Academy of Science in 1886: "All attempts at saving the universe from this thermal death have been unsuccessful, and to avoid raising hopes I cannot fulfil, let me say at once that I too shall here refrain from making such attempts."[32]

At this point, I need to cover some technical material.[33] I do not expect every reader to follow these arguments closely. I am including this section so that students and scholars will recognize how important the concept of cosmic time is in the worldview of modern science, and how important to science's concept of cosmic time the concept of entropy has become. Science textbooks seldom consider such questions in detail. Christian textbooks had better consider them in the future in much greater detail. We are now approaching the soft underbelly of modern science: its despair concerning the future.

Linear Time vs. Cyclical Time

I know of no more brilliant and incisive historian of science than Stanley Jaki. His book, *Science and Creation* (1974), is nothing short of a classic. He discusses in considerable detail the impact that the second law of thermodynamics had on the premier scientists of the late nineteenth century. There was no escape from the cosmological implications of Sadi Cournot's observations of heat pumps and his long-neglected 1824 conclusion concerning heat loss:

(Garden City, New York: Anchor, n.d.), pp. 45–46.

32. Ludwig Boltzmann, "The Second Law of Thermodynamics" (1886), in *Theoretical Physics and Philosophical Problems*, edited by Brian McGuinness (Boston: D. Reidel, 1974), p. 19.

33. Providentially, I was pushed into this because of continuing harassment by my friend Arthur Robinson.

> The cosmological implication of the loss of a part of the utilizable energy in every physical process was spelled out by [Lord] Kelvin [William Thompson—G. N.] as early as 1852. Two years later Helmholtz himself ap praised Carnot's principle "as a universal law of nature" which radiated light "into the distant nights of the beginning and the end of the history of the universe." In 1865 Clausius summed up the Second Law of thermodynamics in the now famous statement, "The entropy of the universe tends towards a maximum." After that only a few years passed before two theologically minded Scottish physicists, B. Stewart and P. G. Tait, concluded that the law of entropy proved it absolutely certain that the minimum and maximum entropy of the universe represented its beginning and end.[34]

Jaki makes the very important point that every attempt to overcome the logic of Clausius' position has "implied the notion of a universe capable of restoring in endless cycles the energy dissipated across the endless expanse of space." Jaki cites the argument of W. J. M. Rankine, one of the founders of thermodynamics, that the dissipated energy might create new stars and planetary systems. "According to Rankine's conception, the universe consisted of cosmic compartments in any of which either the reconcentration or the dissipation of energy was going on at any given time. . . ." This does not make better sense a century later. Nevertheless, Jaki writes, "Whatever one may think of Rankine's speculations, he at least faced with frankness a real problem instead of trying to talk it away or give it the silent treatment."[35] A lot of scientists still play the academic game called "sweep this implication under the rug."

Boltzmann's Subsequent Attempt

Jaki recognizes the similarities between Rankine's view and the one articulated by Boltzmann two years before he committed suicide, and eighteen years after his lecture in which he had decided not to challenge Clausius' theory of the heat death of the universe. In 1904, Boltzmann argued that within the framework of a universe that is already in equilibrium, there

34. Stanley Jaki, *Science and Creation: From eternal cycles to an oscillating universe* (Edinburgh: Scottish Academic Press, [1974] 1980), p. 294.

35. *Ibid*., p. 295.

can be pockets of randomly appearing order.[36] This theory was an extension of his theory first articulated in his *Lectures on Gas Theory,* published in two sections in 1896 and 1898. In that work, he had abandoned the idea that time is linear: "In any case, we would rather consider the unique directionality of time given to us by experience as a mere illusion arising from our specially restricted viewpoint."[37]

Here was the founder of statistical mechanics formulating a theory of gigantic fluctuations within a universe already in equilibrium, a theory which required him to give up the idea of linear time. Why did he do this? Because so powerful and threatening was Clausius' hypothesis of the heat death of the universe that Boltzmann was desperate to find an alternative, no matter how incoherent and implausible. This is science at its worst. He had no evidence to point to—nothing. He had only some mathematical expressions of the theory and a desire to escape the rule of the second law. Jaki's assessment is on target: "The saving grace of the Boltzmann cosmology was that its most special features were relegated to the realm of the unobservable, to the realm of the infinitely distant."[38] In other words, no one could test his hypothesis.

Today, we find few supporters of Boltzmann's theory. Not that scientists wouldn't like to support it. It does offer a possible solution to a difficult problem: an explanation of biological life, a clearly "anti-entropic" aspect of the universe.[39] Life seems to violate the pre diction of increasing cosmic

36. "The laws of probability calculus imply that, if only we imagine the world to be large enough, there will always occur here and there regions of dimensions of the visible sky with a highly improbable state of distribution." "Über statistische Mechanik" (1904) in *Populäre Schriften* (Leipzig: J. A. Barth, 1905), p. 362; cited by Jaki, ibid., p. 297.

37. Boltzmann, *Lectures on Gas Theory*, translated by S. G. Brush (Berkeley: Uni versity of California Press, 1964), p. 446; cited in ibid., p. 300.

38. *Ibid*., p. 299.

39. "It is by avoiding the rapid decay into the inert state of 'equilibrium' that an organism appears so enigmatic. . . ." Erwin Schrodinger, *What Is Life? The Physical Aspect of the Living Cell* (Cambridge University Press, [1944] 1967), p. 75. "What I wish to make clear in this last chapter is, in short, that from all we have learnt about the structure of living matter, we must be prepared to find it working in a manner that cannot be reduced to the ordinary laws of physics." *Ibid*., p. 81. Cf. Emmett L. Williams, "Resistance Of Living Organisms To The Second Law Of Thermodynamics," in Williams (ed.), *Thermodynamics and the Development of Order* (Norcross, Georgia: Creation Research Books, 1981), ch. 5.

disorder and randomness. But Boltzmann's theory breaks down, or so argues physicist Don Kelly:

> Boltzmann's fluctuation hypothesis suggests that the universe is in equilibrium but that the portion which we observe is part of a gigantic fluctuation—the granddaddy of all accidents. At first sight, the argument for such a hypothesis seems to be a strong one. Some sort of fluctuation is required to ensure the existence of observers (you and me!), that is, biological development requires special conditions—conditions of a distinctly nonequilibrium nature. Thus the very fact that such biological development has occurred—that I write and you read—seems to be strong evidence for the fluctuation hypothesis. However, the argument is unsound. It is enormously more likely that such a fluctuation would occur over a small volume, say the size of our solar system, and leave the rest of the immediate universe in equilibrium. To pursue the traffic analogy, being involved in an accident is not unusual, but we would generally be able to see beyond the wreckage and discern the equilibrium flow of traffic. The chance that the fluctuation hypothesis is true is less than the likelihood of an accident involving every car on the road today. Such states of chaos seem most unlikely.[40]

Nevertheless, scientists are playing with explanations of the universe that are far more unlikely than anything Boltzmann proposed. Modern science has until very recently been unalterably opposed to the biblical idea of God's creation of the universe out of nothing. Modern science has therefore been pagan in its orientation, as dedicated as Aristotle was to the idea of the eternality of matter.[41] No longer. The doctrine of creation out of nothing has reappeared, accompanied by a concept of de-creation into nothing. John Gribbin summarizes:

> Perhaps cosmology really is a branch of particle physics. For, according to one idea that has progressed over the past ten years or so all the way from being thought of as completely crazy to the

40. Kelly, *Thermodynamics and Statistical Physics*, p. 121.
41. Aristotle, *Physics*, Part VIII.

> near-respectability of being regarded merely as outrageous, the universe and everything in it may be no more, and no less, than one of those vacuum fluctuations that allow collections of particles to burst forth out of nothing, live for a while, and then be reabsorbed into the vacuum. The idea ties in very closely with the possibility that the universe may be gravitationally closed. A universe that is born in the fireball of a Big Bang, expands for a time and then contracts back into a fireball and disappears, *is* a vacuum fluctuation, but on a very grand scale.[42]

As he says, this idea can be traced back to Ludwig Boltzmann. Now it has begun to catch on.

Catch on to *what?* To what is this theory hanging on? It is a vacuum theory for periodic vacuum worlds spun in the minds of scholars who do not want to face the biblical cosmology of the creation of the universe by God. They want to avoid linear history to such an extent that they are willing to fuse pagan cyclical theories of time with endless, impersonal, purposeless creations out of nothing and destructions into nothing. But then what happens to the first law of thermodynamics, that matter-energy is neither created nor destroyed?

Atheism's universe is coming unglued, along with atheism.

The Communist Position: Cyclical History

One scientist adamantly rejects Clausius' theory of heat death: Soviet scientist I. P. Bazarov. This is understandable. To say a good word for Clausius in the Soviet Union is the first step in a trip to the Gulag archipelago. Frederick Engels, the co-founder of Communism, was a bitter foe of Clausius' theory. As I have argued else where, Marx's conception of time seems on the surface to be linear, and therefore Western, but at bottom, it is a cyclical view. There is nothing in Marx's system to explain why the future Communist society will not fall into alienation again, and begin another cycle of historical development from communism to slavery to feudalism to capitalism to socialism, and finally to yet a higher state of communism.[43]

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42. John Gribbin, *In Search of Schrodinger's Cat: Quantum Physics and Reality* (New York: Bantam, 1984), p. 271.

43. Gary North, *Marx's Religion of Revolution: The Doctrine of Creative Destruction* (Nutley, New Jersey: Craig Press, 1968), pp. 100–1.

With Engels, the commitment to cosmic cycles was explicit. It was the foundation of his book, *Dialectics of Nature,* which Bazarov feels compelled to cite in his textbook as if it were a serious work of science. In the Introduction, Engels summarizes his view of the Darwinian revolution: "The new conception of nature was complete in its main features; all rigidity was dissolved, all fixity dissipated, all particularity that had been regarded as eternal became transient, the whole of nature shown as moving in eternal flux and cyclical course."[44] But Clausius' theory of the heat death of the universe pointed to a one time-only historical development. Engels rejected any such view in the name of *cosmic historical cycles:*

> . . . we arrive at the conclusion that in some way, which it will later be the task of scientific research to demonstrate, the heat radiated into space must be able to become transformed into another form of motion, in which it can once more be stored up and rendered active. Thereby the chief difficulty in the way of the reconversion of extinct suns into incandescent vapour disappears.
>
> For the rest, the eternally repeated succession of worlds in infinite time is only the logical complement to the co-existence of innumerable worlds in infinite space. . . . I is an eternal cycle in which matter moves, a cycle that certainly only completes its orbit in periods of time for which our terrestrial year is no adequate measure, a cycle in which the time of highest development, the time of organic life and still more that of the life of beings conscious of nature and of themselves, is just as narrowly restricted as the space in which life and self-consciousness come into operation; a cycle in which every finite mode of existence of matter, whether it be sun or nebular vapour, single animal or genus of animals, chemical combination or dissociation, is equally transient, and wherein nothing is eternal but eternally changing, eternally moving matter and the laws according to which it moves and changes.[45]

Thus, the laws of nature are somehow eternally fixed, yet the total flux

44. Engels, *Dialectics of Nature* (New York: International Publishers, 1940), p. 13. This book was extracted posthumously from his notebooks.

45. *Ibid*., pp. 23–24.

of material cycles is equally eternal. So, he concludes the Introduction, "we have the certainty that matter remains eternally the same in all its transformations, that none of its attributes can ever be lost, and therefore, also, that with the same iron necessity that it will exterminate on the earth its highest creation, the thinking mind, it must somewhere else at another time again produce it."[46] In short, there is no end of time. More to the point, *there is no inescapable physical process that points to the end of time, and which therefore points also to the destruction of mankind, the god of communism.*

The debate over the proper application of the second law of thermodynamics is not simply a neutral scientific debate, for there is no such thing as a neutral scientific debate. It is a debate over cosmology. It is a debate over the origin and final fate of the universe. It is therefore a debate about the existence of God. Engels recognized this, though modern physicists prefer to ignore the obvious. Referring to Clausius, Engels asks what becomes of the "apparently" lost heat. He is confident in his cyclical theory as he is in his atheism. "No wonder that it has not yet been solved; it may still be a long time before we arrive at a solution with our small means. But it will be solved, just as surely as it is certain that there are no miracles in nature and that the original heat of the nebular ball is not communicated to it miraculously from outside the universe."[47] No miracles, please. The universe is a closed system. By humanist definition, it *must* be a closed system.

Jaki has identified the source of Engels' animosity to Clausius. "Clausius, entropy, and the heat-death of the universe meant one and the same thing for Engels. They represented the most palpable threat to the materialistic pantheism of the Hegelian left for which the *material* universe was and still is the ultimate, ever active reality. Engels made no secret about the fact that the idea of a universe returning cyclically to the same configuration was a pivotal proposition within the conceptual framework of Marxist dialectic. He saw the whole course of science reaching in Darwin's theory of evolution the final vindication of the perennial recurrence of all, as first advocated by the founders of Greek philosophy."[48]

So we find that poor Professor Bazarov must reject Clausius' theory of heat death, and worse, that he must cite Engels as his justification. He notes that "the reactionary views of Clausius have been the subject of Engels'

46. *Ibid*., p. 25.
47. *Ibid*., p. 202.
48. Jaki, *Science and Creation*, p. 312.

crushing criticism."[49] He then cites "materialist" Boltzmann's theory of fluctuations as a possible alternative to Clausius, reproducing a section from *Lectures on Gas Theory.*[50] But he then rejects the heart of Boltzmann's theory, namely, the existing equilibrium of the universe.[51] He offers no resolution to the problem. He uses two arguments that have gone nowhere in this century: 1) that the thermodynamic principles that apply to a laboratory experiment do not apply to the universe as a whole (an approach taken by the physicist Ernst Mach in the late nineteenth century, in contradiction to his own theory of the gravitational influence of the whole universe on all parts)[52] and 2) the appeal to some sort of statistical formula escape hatch, without a description of the physical processes that would make the statistical solution possible (Boltzmann's approach). It is an oddity of history that Boltzmann killed himself in 1906 because other physicists kept clinging to Mach's soon to be outmoded anti-atomism theory,[53] yet they both unsuccessfully opposed Clausius.

Humanist Versions of Death and Resurrection

The second law of thermodynamics teaches that *if* the universe is a closed system, then the world is wearing out. It is going to die. It is headed for an inescapable heat death. Only if it contracts, and becomes a "cosmic egg," as Asimov calls it,[54] playfully reviving the imagery of the creation accounts of primitive paganism,[55] to explode in another Big Bang, can the heat death of the universe be avoided.

Man either dies from heat death or dies from the crushing weight of being squeezed into the cosmic egg. In short, man is doomed . . . *if the universe is a closed system.*

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49. I. P. Bazarov, *Thermodynamics* (New York: Macmillan, 1964), p. 76. The typeface of this book is the familiar style used only by the English-language division of Moscow's publishing operation. It is obvious that Macmillan simply photocopied the book and published it in the United States.

50. *Ibid*., p. 77.

51. *Ibid*., p. 78.

52. Jaki, pp. 297–98.

53. John T. Blackmore, *Ernst Mach: His Work, Life, and Influence* (Berkeley: University of California Press, 1972), ch. 13.

54. *A Choice of Catastrophes*, p. 59.

55. Mircea Eliade, *Patterns in Comparative Religion* (New York: Sheed & Ward, 1958), pp. 413–16: "The Cosmogonic Egg."

What began as an observation of heat pumps in 1824 became after its rediscovery in 1850 a debate over the nature of the universe. It also become a debate over the nature of time. As Angrist and Helper remark: "All other variables with which science is concerned can be increased or decreased—but entropy and time always increase. Entropy can only be decreased temporarily and then only in a localized region at the expense of a greater increase elsewhere. It is a one-way variable that marks the universe as older today than it was yesterday. Entropy, as Arthur Eddington expressed it, is 'Time's Arrow.'"[56]

At the beginning of this appendix, I cited astronomer Sir James Jeans' observations concerning the heat death of the universe. He recognized clearly that the debate is between those who believe in linear time and those who believe in cyclical time. He also recognized the religious impulse of this continuing debate:

> The science of thermodynamics explains how everything in nature passes to its final state by a process which is designated the "increase of entropy." Entropy must forever increase: it cannot stand still until it has in creased so far that it can increase no further. When this stage is reached, further progress will be impossible, and the universe will be dead. Thus, unless this whole branch of science is wrong, nature permits herself, quite literally, only two alternatives, progress and death: the only standing still she permits is in the stillness of the grave.
>
> Some scientists, although not, I think, very many, would dissent from this last view. While they do not dispute that the present stars are melting away into radiation, they maintain that, somewhere out in the remote depths of space, this radiation may be reconsolidating itself again into mat ter. A new heaven and a new earth may, they suggest, be in process of being built, not out of the ashes of the old, but out of the radiation set free by the combustion of the old. In this way they advocate what may be described as a cyclic universe; while it dies in one place the products of its death are busy producing new life in others.

56. Angrist and Helper, *Order and Chaos*, p. 160.

> This concept of a cyclic universe is entirely at variance with the wellestablished principle of the second law of thermodynamics, which teaches that entropy must for ever increase, and that cyclic universes are impossible in the same way, and for much the same reason, as perpetual motion machines are impossible. That this law may fail under astronomical conditions of which we have no knowledge is certainly conceivable, although I imagine the majority of serious scientists consider it very improbable. There is of course no denying that the concept of a cyclic universe is far the more popular of the two. Most men find the final dissolution of the universe as distasteful a thought as the dissolution of their own personality, and man's strivings after personal immortality have their macroscopic counterpart in these more sophisticated strivings after an imperishable universe.[57]

Re-read that last sentence. It comes to the heart of the matter concerning the fate of matter. *The death of the universe is the psychological equivalent of the death of God, for it points to the death of man, humanism god.* Man's environment will have long since disappeared. Nothing will carry on man's work, man's story, or man's meaning. Man will not *be* the judge of himself and the universe around him. The universe dies, and man must die with it. Man, the king of humanism, is in fact nothing more than a *cosmic parasite,* and his host is dying. This is bad news for all those men whose dream of autonomy from God has led them to proclaim an autonomous universe, closed to God.

God alone could sustain the dreams of man by regenerating the universe, even as He regenerates man. But regeneration points to the final judgment, and autonomous man above all wants to avoid the eternal judgment. Better the ultimate despair of the heat death of the universe or the pseudohope of a cyclical universe which will destroy today's man, but which will open the possibility of eternally recurring cycles of Big Bangs, thermodynamic dissipation, con tractions, and Big Bangs. Better eternal cycles than an eternity in hell, says modern man. And for God-denying, God-defying men, this conclusion is correct. It is not an available option, but it certainly would be better than hell. But it is not better than resurrection and eternal

57. Jeans, *The Mysterious Universe*, pp. 179–81.

life for those people whom God chose before the foundation of the world to regenerate (Ephesians 1:4–7).

Columbia University's astronomer Lloyd Motz gives us science's two options: heat death or cosmic crushing. He favors the latter, by the way. "While it appears that the earth is safe from galactic catastrophes, it is not safe from the various overall cosmological events that can, and ultimately will, bring things to an end. *An end* here does not mean that all matter will disappear but rather that a situation will occur where the orderly evolution and change that a man sees going on all around him will cease. This will happen either because the universe has run down, like the spring of a watch, or because it has contracted down to a tiny, but highly concentrated, bit of matter."[58]

He favors the oscillating universe, as did all the pagans of the ancient world. Somehow, being crushed to death gives man hope, for "man's existence implies that life will occur over and over again, but not precisely as it evolved in the present universe, for the normal fluctuations that occur in all physical systems will change the initial conditions of each new expansion phase of the universe, so that no two such phases will be identical. Thus, men have (in their own existence) not only the promise of life renewed but also the promise of almost infinite variety in such life."[59] This is humanistic science's version of hope in the resurrection. This is how he hopes to escape the curse of God, "ashes to ashes, dust to dust." Cosmic dust will revive itself, and it will again bring forth life.

Who knows, maybe you will someday become a dinosaur with a high IQ! Such is the logic of the humanist who combines Darwin and ancient man's cyclical cosmology in order to escape the logic of Rudolph Clausius. This is reincarnation without a belief in the human soul. This is madness.

Conclusion

The only thermodynamics textbook I have seen that at least points to the underlying cosmological issues is Gordon J. Van Wylen's. He is at least willing to ask the inevitable questions that are raised by the equations for the second law of thermodynamics and its physical state, entropy. He is willing to do what the other textbook writers judiciously avoid: come to grips with God.

58. Motz, *The Universe: Its Beginning and End*, p. 305.
59. *Ibid*., p. 317.

> A final point to be made is that the second law of thermodynamics and the principle of increase in entropy have great philosophical implications. The question that arises is how did the universe get into the state of reduced entropy in the first place, since all natural processes known to us tend to in crease entropy? Are there processes unknown to us, such as "continual creation," which tend to decrease entropy, and thus offset the increase in entropy associated with the natural processes known to us? On the other end of the scale the question that arises is what is the future of the universe? Will it come to a uniform temperature and maximum entropy, at which time life will be impossible? Quite obviously we cannot give conclusive answers to these questions on the basis of the second law only, but they are certainly topics that illustrate its philosophical implications. The author has found that the second law tends to increase his conviction that there is a Creator who has the answer for the future destiny of man and the universe.[60]

Next, consider his comments in the 1973 edition. He and his co-author ask some new questions: "Does the second law of thermo dynamics apply to the universe as a whole? . . . If the second law is valid for the universe (we of course do not know if the universe can be considered as an isolated system) how did it get in the state of low entropy?" Then they repeat his original affirmation of a Creator, although they do not capitalize the word in the later edition.[61] They raise the relevant question: *ls the universe really a closed system?* As believers in God, obviously they know that it isn't, but they do raise the question. It is *the* question that must be raised.

Modern physics and modern astronomy leave mankind without hope. Bertrand Russell saw its implications clearly. He wrote in 1935: "Some day, the sun will grow cold, and life on the earth will cease. The whole epoch of animals and plants is only an interlude between ages that were too hot and

60. Gordon J. Van Wylen, *Thermodynamics* (New York: Wiley, [1959] 1961), p. 169. Three comments are in order. First, Van Wylen was Chairman of the Department of mechanical engineering at the University of Michigan. Second, Wiley is a conventional publisher of scientific books. Third, the book was in its third printing.

61. Gordon J. Van Wylen and Richard Sontag, *Fundamentals of Classical Thermodynamics* (2nd ed.; New York: Wiley, 1973), p. 248.

ages that will be too cold. There is no law of cosmic progress, but only an oscillation upward and downward, with a slow trend downward on a balance owing to the diffusion of energy. This, at least, is what science at present regards as most probable, and in our disillusioned generation it is easy to believe. From evolution, so far as our present knowledge shows, no ultimately optimistic philosophy can be validly inferred ."[62]

To overcome this inherent, inescapable pessimism of modern Western science, Jeremy Rifkin offers what he says is new hope for the future, but without adopting the Christian doctrines of creation, redemption, and resurrection. The quality of such hope we will explore in detail in subsequent chapters.

In summary:

1. The second law of thermodynamics has become a major scientific foundation of modern pessimism.
2. Most scientists fail to speak out on major philosophical issues.
3. Three major views of the world govern all interpretations: power religion, escape religion, and dominion religion.
4. Pessimism concerning the future is common to the escape religion.
5. Humanistic pessimism is acknowledged in principle but ignored as much as possible by the power religion.
6. Pessimism is denied by the dominion religion.
7. The pessimists want to escape God's judgment, either in history (through the "Rapture") or at the end of time (atheism, mysticism).
8. Those who write on the second law seldom mention its impli cations.
9. The second law teaches that the universe is becoming more random, wearing out.
10. The universe is therefore headed for extinction.
11. This has been taught by the physicists who pioneered the laws of thermodynamics.
12. The debate over the second law of thermodynamics is important because of its effect on man's concept of time and final judgment.

62. Bertrand Russell, "Evolution," in *Religion and Science* (New York: Oxford University Press, [1935] 1972), p. 81.

13. Some physicists have created incoherent explanations of the universe in order to escape the implications of the second law.
14. The only atheistic alternative to the linear history of entropy is cyclical history.
15. Cyclical history was the outlook of the pagan ancient world.
16. Rebellious men do not want to think about the end of time, for it points to the final judgment.
17. If the universe dies, then man dies.
18. If man dies, there can be no meaning to the humanist's world.
19. The humanist is today without hope.

[This was first published as Chapter 2 of my book, *Is the World Running Down? Crisis in the Christian Worldview* (Tyler, Texas: Institute for Christian Economics, 1988): "The Pessimism of the Scientists."]

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SCRIPTURE INDEX

Old Testament

Genesis
1:1, 242
1:2, 248
1:26, 242
1:26–28, 214, 682
1:26–30, 252
1:28, 185, 265, 270, 814
1:28a, 313-14
1:29, 270
1:31, 189,
1:31b, 166
2:9, 969
2:10–12, 456
2:15, 211, 264
2:15–16, 253
2:16–17, 175, 258, 653
2:17, 183, 962
2:19–20, 322
2:20–21, 265
3:17, 373
3:17b, 260
3:17–18, 539
3:17–19, 84, 205, 297, 564, 622, 989
3:27b–19, 322
3:19, 274
3:21, 274
3:22, 961
3:23, 970
3:24, 283
4:2b, 322
11, 262
11:6–7, 247
12:1–5, 809
13:5–11, 348
13:16, 313
14: 774
14:18–20, 347–48
14:19–20, 770
14:21–24, 347
15:2–4, 350
15:5–6, 185
15:9–10, 770
15:12–16, 423
15:16, 864–65
15:16–18, 770
17, 346, 774
17:7–8, 771
17:8, 961
17:7–8, 832
17:10, 771
17:27, 771
18:22–28, 346
19:1, 348
19:32, 348
19:35, 350
23:1, 348
23:16, 347
25:1–2, 348
27:28–29, 771
27:12–15, 771
28:20–22, 771
29:20, 825, 880
29:20a, 823
29:21b, 823
34:11–12, 244
36:6–8, 313
41:35–36, 560
47:13–14, 560
47:23–24, 932
50:16–20, 421
50:20, 226, 423

Exodus
3:14a, 177
12:37, 313
12:49, 903
15:17–18, 616
18:21, 417
19, 731
19:7008, 581
20, 731
20:7, 175
20:8–11, 757, 842
20:15, 175, 258, 272, 278, 405, 583, 653, 654
20:16, 654
20:17, 583, 908
20:25–26, 609
21, 876
21:2–4, 822
21:4, 823
21:5–5, 550, 884
21:7–8, 826
21:16, 423
21:22–25, 908–9,
21:28–30, 264

21:28–31, 634
21:33–34, 631, 634
22, 659
22:1, 296
22:1–4, 467
22:3, 879
22:3,b, 881
22:3–4, 653
22:4, 296, 654
22:6, 285
22:5–6, 635
22:5–6, 948
22:6, 659
22:16–17, 244
22:25, 849
22:25–27, 483
23:8, 465
23:10–11, 862
23:10–12, 866
30:11–13, 454
30:13, 922
31:12–17, 758–59
31:14–15, 866
35:30–35, 231
36:1, 231

Leviticus
1:10, 951
2:3–10, 417
4:18–21, 874
4:26, 417
5:17, 934
7:26, 417
8:8–12, 870
13, 956–57
13:1–3a, 948
13:8, 948
18:28, 867
19:13, 279
19:11–12, 450
19:15, 279, 290, 293, 353, 401, 903, 944
19:18, 901
19:35–36, 450
19:35–37, 904
20:10, 910
23:10–11, 417
23:19–20, 417
24:44–46, 878
26, 424
26:33–34, 765–66
25:1–7, 316, 765, 862
25:8–12, 890–91
25:8–13, 766, 862
25:10b, 864
25:29–30, 857, 864
25:29–33, 884
25:35–37, 574–75
25:37, 850
25:35–37, 849
25:39–41, 879
25:44–46, 874, 875, 883, 890
25:50–52, 882
27:32–34, 777

Numbers
1:1–4, 922
8:21, 769
9:11, 926
10:9, 918
18, 769
18:25–27, 769–70
26:52–56, 961
30:1–2, 520
32:20–24, 961

Deuteronomy
4, 620
4:5–8, 619
4:41, 647
4:41, 966
5:5–8, 841
5:15, 757
6:1–3, 619–20
6:4–5, 774
8:15–18, 600, 612, 621, 731
8:16–18, 598, 761, 801, 837, 915
8:16–19, 574
8:16–20, 723
8:17, 186, 767, 1020
8:17–18, 184, 436
8:18, 206, 615
8:18–20, 598
9:17, 880
15, 483
15:1–6, 766, 864
15:7–8, 850, 855
15:7–10, 766
15:12, 826
15:12–15, 879
15:15–16, 879
15:13–15, 851–52
8:17, 875
17:8–11, 933
17:14–17, 930
17:18–20, 903–4, 929
19:2–3, 647
19:8–9, 647
19:14, 653
20:5–9, 919
20:10–15, 923
20:11, 883

20:16–18, 961
21:11, 923
22:8, 648
22:28–29, 823
23:19, 535
23:20, 574
24:5, 919
25:1–3, 972
25:13–15, 451
25:14–15, 553
28, 199. 424, 731
28:1–2, 840
28:1–14, 508
28:1–6, 612
28:1–14, 573–74, 800, 878, 1023
28:12–13, 533
28:12–14, 572
28:43–44, 581
28:43–45, 572
28:43–46, 537
29:29, 302, 514–15, 523
30:3–5, 598–99
31:9–13, 635
31:10–12, 923, 930

Joshua
9, 197
17, 864
18:8–10, 960
20:1–6, 966
24:13, 864
24:13, 1020

Judges
1:7–8, 225
1:28, 883
4:4–7, 918
5:1–2, 918
5:9, 922
5:16b–17, 922
5:23, 922
20:18–19, 922

I Samuel
2:7–8, 617
5:1–10, 512
5:11–12, 513
6:1–2, 513
6:7–9, 512
6:10–12, 514
6:17–18, 513
8:10–15, 929
8:14, 17, 777, 901
8:19–20, 931
25:44, 201

II Samuel
3:16, 201
7, 625

I Kings
2:13–15, 197
3:14, 183
5:12, 371
5:6, 362
5:8–12, 362
6:11–13, 363
19:19–21, 811

II Kings
6:14–19, 982
6:25, 378
7:1–2, 318
7:20, 379

II Chronicles
6:28–29, 776
19:4–7, 903
21:1–3, 613
36:19–31, 863
36:21, 320–21

Nehemiah
13:19–22, 764

Job
275
1:3–5, 275
1:6–12, 273–74
1:20–22, 273
2:9–10, 276, 802
43:7–10, 802

Psalms
2:2–7, 280
2:17–20, 280
24:1–2, 242, 253, 631, 834
27:9, 880
37:11, 210
37:21a, 167
37:25, 617
50:10, 302
73, 784
73:2–7, 280
89:34, 239
110, 799
110:1–4, 799–800
112:1–5, 723
119, 217
119:89–91, 198
119:97–99, 735
119:98–100, 198
119:99, 847
119:164–68, 198–99

Proverbs
1:7, 784
2:3–4, 435
3:13–15, 837
6:1–6, 637
8:10–11, 435
8:17, 889
8:32–36, 521, 1007
9:10, 784
11:26, 648
13:21–22, 591
13:22, 196, 280, 365, 629, 750
13:22b, 1020
22:7, 860
16:16, 435
18:10–11, 448
18:11, 788
19:17, 780
21:1, 217, 423
21:1–2, 226
22:7, 537, 572
22:26–27, 637
24:3–4, 262
24:23b, 903
25:21–22, 781
30:7–9, 792
30:8–9, 615

Ecclesiastes
2:10–11, 806
2:16–17, 805
2:18–21, 212
4:9–11, 265–66
4:9–12, 521
5:4–5, 167
5:4–6, 520
4:9, 333
4:9–16, 386
4:12, 334
7:12, 435
12:11–12, 680

Isaiah
1:21–23
1:22–23, 451
1:24–25, 466
1:24–28, 904–5
1:21–23a, 904
5:20, 189
28:13, 916–17
45, 217
56:11–12, 595
61:1–2, 874

Jeremiah
25, 877
31:31–33, 878

Ezekiel
16, 826
16:5, 826
16:9–13, 826
16:17, 827
16:42, 827
18:8–9, 860
45:9–10, 450
47:22–23, 863

Daniel
6:14–17, 197

Amos
1:1, 811
5:4, 916

Micah
6:10–13, 450

Malachi
3:5–6, 198
3:8–10, 769
3:8–10, 772

New Testament

Matthew
4:3–4, 398
4:8–11, 296
4:9, 277–78
4:18–22, 809
5:3, 211
5:5, 210, 933
5:17–19, 842
5:38–42, 851
5:38–42, 782, 915
6:1–4, 744
6:5–6, 745
6:9b–13, 745
6:12, 282, 575
6:19–20, 486
6:19–21, 199, 746
6:24, 741, 744, 746, 840
6:33, 210, 256, 331, 344, 351, 435, 523, 724, 741, 747

6:33–34, 744
6:34, 747
8:5–10, 389
9:9, 810
11:27, 245–46
12:36–37, 503, 633–34
13:24–26, 753
13:36–43, 753
13:44–46, 697
15:21–28, 389–90
16:24–26, 783
16:26, 213–14, 288
16:26–27, 705
19:16–22, 782
19:23–30, 782–83
20:1–4, 548
20:1–7, 501
20:12–13, 632
20:13–15, 399
20:13–16a, 548–49
20:15, 631, 632
20:25–28, 386
21:23, 432
21:26–27, 392
21:37–41, 243
6:24, 241
21:42–43, 549
21:43, 886
22:15–21, 455
22:15–32, 432
25:1–13, 827–28
25:14–30, 361, 386, 583, 634, 781
25:24–25, 527
25:24–27, 589
25:24–30, 524
25:27, 849
25:28–30, 587
25:30, 211
25:30–41, 682
25:31–45, 827
25:31–46, 212
26:39, 805
27:3, 291
27:24–26, 833–34
28:18–20, 621
28:18–20, 724

Mark
1:16–20, 555
2:13–14, 809
7:21–23, 908
10:45, 829

Luke
4:16–21, 875
4:16–21, 856–57
4:17–21, 868–69
4:18–19, 878
4:18–19, 890
5:7–10, 555
6:34–36, 575
6:34–36, 850
10:2–3, 738
10:8–12, 350
10:25–37, 418
10:37b, 216
12:1–4, 169
12:16–21, 360
12:16–21, 633
12:19–21, 165
12:42–48, 591–92
12:42–48, 706
12:47–48, 299, 748, 814–15
14:28–32, 207–8
14:28–30, 312
14:28–32, 193, 32, 565, 684
14:28–33, 976
16, 300, 311, 687, 705
16:9–13, 747
17:7–10, 282
17:7–10, 805
19:11–27, 682
19:11–27, 71
19:17, 627
21:25–28, 682
21:31–33, 754
22:21–22, 288
22:22, 877
22:25–30, 833

John
1:1–3, 242
1:12, 813–14
1:18, 245
2:6–9, 397
3:26b–30, 828
6:44, 814
6:45–46, 245
9:4, 183
9:4, 331
9:4, 558
10:10, 204
14:26, 333
15:26, 333
16:12–13, 246

Acts
1:3, 805
1:9, 805
5:29b, 897
5:40, 897
7:58, 798

9:3–7, 812
16:29–33, 249
18:8–11, 925
20:16, 926
22:3, 798
23:1–5, 896
23:1b, 926
25:10–11, 897–98

Romans
1:18–19, 297
2:11, 903
5:3–5, 805
5:8, 213
7:6, 197
8:19–22, 762
8:20–22, 260
8:28, 308
9:15–17, 288
10:9–10, 774
10:17, 258
12:4, 239
12:17–19, 897
12:20, 748, 781
12:20–21, 780
13:1–7, 895
13:3–4, 896
13:8, 575
13:8, 578
14:5, 757
14:5, 759
14:5–6, 868
14:1–2, 705
19:6–8, 244

I Corinthians
2:15–16, 193
3, 196, 815
4:6–9, 798
4:10–12, 812
6:1–6, 913–14
6:23, 783
7:21, 550
7:21b, 875
7:22–23, 880
9:7–12, 813
10:13, 187
11:1, 800
12:12–27, 239
13:12, 166, 525
15:20–24, 800
15:24–28, 243, 591, 724, 829–31
15:45–49, 256–57
16:1–2, 763

II Corinthians
5:10, 705
11:1–3, 829
11:24–28, 799
11:27, 812

Galatians
6:16, 774
6:16, 827
4:4–5, 775

Ephesians
1:1–11, 242
1:3–6, 253
1:3–12, 213
1:4–7, 1042
1:19–21, 261
2:2, 274
2:6–10, 828–29
2:8–9, 210, 213
2:8–10, 760
5:15–17, 355
5:25–27, 828

Philippians
1:20–24, 803
2:12, 761
2:12b, 304
2:4–11, 780
2:5–11, 580
2:6–8, 799
2:9–11, 799
3:14, 1016
4:3, 177
4:10–13, 797

Colossians
1:15–16, 243
2:16, 757. 759

I Thessalonians
4:16–17, 754

I Timothy
1:8–11, 842
1:10, 880
2:1–2, 900, 914
2:1–4, 782
2:5–6, 829
2:14, 263
3, 395, 814
5:17–18, 395
6:6–10, 797, 794
6:10, 435

Hebrews
1:1–3, 242–43
2:17–3:1, 348, 774
4:1–11, 869
4:4, 774
4:6–7, 762
4:8–11, 762

5:10, 774
7, 800
7:1–2, 774
7:5–11, 769
7”6–11, 775
7:12, 775
7:22–24, 775
13:5–6, 797

James
1:5–6, 225
1:7, 798
1:17, 239, 282
1:17a, 657, 736
1:22–23, 166
1:22–25, 245
5:1–6, 793

I Peter
1:17, 903
1:18–19, 829
2:13–17, 897
2:9–10, 774
3:21–22, 189

I John
4:18, 784

Revelation
1:9–10, 764
3:16, 867
6:9–10, 299
19:1–9, 828
19:6–9, 591, 834
20:11–15, 189
20:14, 300
20:14–15, 212
20:14–15, 387, 509
21, 705
21:1–2, 828, 835, 969–70
21:7–8, 835
22, 705

INDEX

***a posteriori*, 101, 102, 992, 1014**
a priorism, 31–32, 996, 999
Abel, 322–23
Abner, 201
abolitionism (slavery), 890
Abraham
  calling, 809–10
  covenant, 249, 548, 745
  covenant line to Jesus, 833–34
  genocide and inheritance, 864, 925, 960–61
  Lot &, 313, 249
  negotiator, 346–50, 355
  parable of hell, 300
  sacrifice of Isaac, 784
  success, 355
  tithe, 769–71, 774–75
abstraction, 256, 357, 359
academia
  anti-Bible, 84–85
  atheistic, 29
  autonomy, 73, 120–21
  cosmology, 4, 26
  humanistic, 119
  Kantian, 84
  neutrality myth, 80–81 (see also neutrality)
  origins, 26
  presuppositions, 23
  screening, xiii
  tax-funded, 81, 122, 126
academic freedom, 121
accountability (autonomy vs.), 706–8
accounting, 167, 308, 309–10, 321, 325
action
  accountability, 706–8
  addiction &, 360
  axiom (Mises), 55, 62, 94, 145, 335, 352, 706–8
  biblical law &, 96
  cost of, 164, 302–11, 329
  Darwinism, 137
  discontentment, 804–5, 807
  ends/means, 75, 148, 984
  equations, 717–19
  equilibrium, 719–20
  ethics &, 95, 74–75, 191, 196
  God's creativity (model), 141–43
  graphs &, 234, 708–17
  imputation, 250, 312
  Kant, 92, 94, 426
  lake of fire (none), 248, 311
  law of, 400, 436
  legal righteousness (civil) &, 424, 467
  naming (Adam), 177
  perfection vs. (Mises), 145–46
  political, 64, 973
  pre-fall, 540–42
  prices &, 63
  purpose, 55–56, 132, 134–37, 233, 710, 722
  responsibility &, 156, 177, 260, 303–4, 706, 909, 953–54
  scarcity &, 311, 434
  sequential, 531
  spontaneous (Hayek), 426
  see also plan, planning
Acton, Lord, 916
Adam

agriculture, 322
allocation from God, 254, 258, 283
authority, 254
covenant, 42, 252–53, 364
Crusoe, 255–58
cursed, 110
death, 274
division of labor, 266
dominion covenant, 42, 252–53 (see also dominion covenant)
fall, 539–40
finitude, 45, 297
garden, 258
inheritance, 278
initial distribution, 254, 258, 283
investing, 270
knowledge, 254, 262–63
language, 262
mentorless, 217
naming, 176–77, 253, 322
natural resources, 264
obedience, 253
power, 255
pre-fall era, 541
responsibility, 254
revelation, 258
scarcity, 300
stewardship, 264
temptation, 43, 44–45, 53, 122, 254, 262
theft, 254
tree (see tree: forbidden)
two families, 135
uneasiness, 148
Van Til on, 16
wife needed, 268
work, 265
Adams, Henry, 818
Adams, Walter, 985
addictions, 360
administrative law, 934–36, 946
Adonai-Bezek, 225
adoption, 54, 826, 832
adultery, 912
Africa, 324
agency capture, 640
agriculture, 315–16, 322–24, 557, 571
Alchian, Armen, 184, 990
algorithms, 115
aliens (slaves), 884
allocation
  addictions &, 360
  bidding, 181
  budgeting, 163–71, 331, 351
  economizing, 226
  future-orientation, 173–74
  goals, 165–66
  God's, 530
  hierarchy of priorities, 174
  high bid wins (see high bid wins)
  knowledge, 163–64
  marginal utility, 358–59
  market process, 201–2
  organizations, 168–69
  ownership, 162
  prices, 426
  purpose, 135–36
  stewardship, 530
  talents parable, 173–74
  time, 164–65, 328
  value scale, 163
Amazon (company), 569–70, 673, 674
amillennialism, 107, 755

anarchism, 898, 919–20
Android operating system, 669
animal husbandry, 324
ant, 159
antinomianism, 620–21, 1016, 1021
Apollo, 662
apologetics (Christian), 23–24, 83–84 (see also Van Til)
Apple, 669
Arbib, Michael, 1013, 1015
arbitrariness, 637–38
Arianism, 245
Ariely, Dan, 804
Aristotle, 234, 534, 857–58
Ark (covenant), 512–15
Arm and Hammer, 666
Armentano, Dominic, 663
army, 919–20
art, 232–34
Asimov, Isaac, 1031–32, 1040
atheism, 7–8, 13, 29, 146, 1037
atomism, 996
auction process
  competitive bidding, 408
  contracts &, 400–1
  democracy, 973
  inside an organization, 170
  field owner (parable), 399–400
  free market, 236, 342, 399
  high bid wins (see high bid wins)
  Mises, 236
  monetary system, 461
  morally legitimate, 401
  non-profit organizations, 974
  ownership rights, 541, 399
  plan reconciliation, 426
  prices, 194, 408
  resentment, 689
  supply & demand, 379–81
  time allocation, 567
  (see also free market)
auctioneer, 398
audience (copywriting), xiv
Augustine, 970
Austrian School of economics, 31, 55, 62, 155
authority
  Adam, 254
  Bible, 24
  centurion, 389
  consumer, 353–54, 690–91
  covenant-keepers, 760
  delegated responsibility, 388
  father, 823–24
  hierarchy &, 260–61
  Jesus, 388–89
  leadership, 388–89
  naming, 178
  plural, 895–98
  posthumous, 783
  responsibility &, 386
  science, 1019
  service, 833
automobiles, 578–79
autonomy
  academia, 73, 120–21
  accountability vs., 706
  apostate man, 1015
  cosmos, 123
  Crusoe, 162
  division of labor vs., 334
  economic theory, 41, 53, 71–81, 241, 622
  ethics, 73
  exhaustive knowledge &, 302–3
  free market, 940

funding, 73
humanism, 47
humanistic economics, 67, 80
intuition, 1015
mathematics, 19
Menger, 195
Mises, 27–28, 1002
myth, 161
presupposition, 23–24, 47, 119
rest vs., 767
self-defeating, 334
self-ownership, 187
value-free economics, 73
Van Til, 1015
wealth, 73, 124, 747
axiology, 227

Babel, 143, 247, 439
back scratching, 339
Bageot, Walter, 492
Bahnsen, Greg, 5
baker, 268
Banfield, Edward, 532, 576
bank-issued money
cartel, 489–90
collateral, 484
counterfeit, 487–88
emergency loans, 483–84
fractional reserves, 484–86
warehouse receipt, 486–89
Bank of England, 491–92
bank run, 494–97
banking
business cycle &, 601–4
cartel, 490–93
central, 609
critics, 596–97
free banking, 608–9
Jesus on, 589–90
legitimate, 590
money creation, 499–500
profit, 526
reform, 607–9
service, 592–96
specialization, 593–94
talents parable, 589–92
traditional, 593–95
uncertainty to risk, 593
bankruptcy, 803
baptism, 249
bargain, 698
bargaining, 503–4 (see also competition, pricing)
Bar Kochba, 832
Barlow, John Perry, 670–72
barn builder, 70–71, 79, 136, 165
barriers to entry, 414–15, 638–39, 644
barter, 341, 578
Bastiat, Frédéric, 425, 640, 663–64
Bazarov, I. P., 1037
beads/string (Van Til), 996
behavioral economics, 235, 355–57, 626–27
Bell's theorem, 101–2
Ben Hadad, 378–79
Berman, Harold, 636, 650, 935–36
Berners-Lee, Tim, 118
Bernstein, Peter, 616
Bezalel, 231–32
Bezos, Jeff, 420, 570
Bhagwati, Jagdish, 722
Bible
authority, 24, 737
creation, 114
eschatology, 107

exegesis, 737
reliable, 85
stories, 255–56
truth, 95–100
biblical law
bureaucracy, 648–49
courts, 650
decision-making, 199–200
dominion, 208
economic growth, 186
free market &, 295
hermeneutic, 875, 890
hostility to, 294–95
one/many, 199
predictability, 945
property rights, 151, 653–54
public recitation, 635
regulation, 648–49
restitution, 654
scholarship, 1016
tool of dominion, 208
(see also Mosaic law)
bidding (auction process)
field owner, 399
information, 506
knowledge, 182
objective, 170, 180–81
prices, 63
self-ownership, 179
subjective/objective, 180–81
Big Bang
before, 24
creation vs., 4, 29
explaining, 237
humanism, 133
impersonal, 29, 132
Kant, 27
metaphor, 236–37
purposeless, 133, 153, 154
thermodynamics, 1024
time frame, 126
Wikipedia, 248n
bimetallism, 460–61
birds of a feather, 581
Black Death, 441
blessings
covenantal, 573–74, 617–19, 783, 840
economic growth, 622, 733
maintaining, 618
objective, 613
blood avenger (Jesus), 972
Boldrin, Michele, 664
Boltzmann, Ludwig, 1033–37
bonds, 586
bondservice, 887
books (digital), xiv–xv
borders, 367–69, 374
Boulding, Kenneth, 1013
boundaries
Adam, 178
division of labor, 248
fire control, 449–50
law, 176
levers, 177
name, 177–79
ownership, 179–80, 259
pollution control, 950–55
productivity vs. curse, 151
property rights, 179–80, 226–27, 963–64
scarcity, 183–84
tree, 149
violations, 948–59
books (see copyright)
bookkeeping, 310, 325

boredom, 327–28
borrower, 532
bread, 657
bride price
  church, 243–44, 834–36, 39
  continuity, 843
  dowry, 831
  eschatology, 836–38
  father, 830
  grace, 830
  inheritance, 243–44, 832
  indentured servant, 822
  master, 824
  stewardship, 835–38
  subordination, 831
Bridegroom, 828, 830
bridges, 966
Bronfenbrenner, Martin, 985–86
brotherhoods, 393
Brown, Ellen, 597
Buchanan, James, 307–9, 984–85
budgeting, 163–71, 331, 351
Buffett, Warren, 626, 786
bureaucracy
  arbitrary, 637–39
  biblical law, 648
  concealment, 510
  funding, 942–44, 946
  inescapable, 945–46
  knowledge, 642
  Mises, 510, 936–37, 936–40
  regulation, 635–37, 639–40
  responsibility, 510
  top-down, 939
  Weber, 940–42
bureaucrats, 636
Burns, Arthur, 478
business, 325–26, 330
business cycle, 598–611
Butler, Samuel, 111–14
buyer (marginal), 382
buyers (competition), 407–8
buzz saw (Van Til), 155

Caesar, 434
Cain, 322–23
calculation, 545
calculus, 710–13, 717
calling
  Abraham, 809--10
  Christian scholar, 84
  count costs, 9
  defined, 16, 73
  disciples, 556
  economist, xv–xvi, 974–75
  general/special, 813–17
  Jesus, 810–11
  job &, 809, 811–13
  mine, 813
  money &, 820
  Moses, 811
  Paul, 813
  scholar's, xii–xiii, 84, 817–20
  spare time, 117
  yours, 982–83
Canaan (population), 313
Canaanite woman, 390
Calvinism, 191
Cancer, 3, 305
capital
  accumulation, 533
  components, 568
  consumption, 533, 580
  covenant &, 614–19
  dominion covenant, 837
  eternity, 592

goals, 355
inheritance of church, 257
kingdom of God, 67
knowledge, 160, 263
labor &, 554–57
limits, 317
markets, 263
measure, 310
misallocated, 603
prices &, 442
redemption &, 213, 546
re-pricing, 608
responsibility, 546
savings, 562–63
state protected, 617
wages &, 556, 559
wisdom, 161
capital theory, 194
capitalism, 277–80, 289–90, 605, 646 (see also free market)
capitalization, 543–44
cartel
banking, 489–90
central banking, 490–93
opportunity, 546
productivity, 554–57
resource conservation, 644
casuistry
continuity, 217
defined, 189, 192
economic, 189, 209, 357, 427
economic theory, 233
image of God, 207
imputation, 427
judgment, 96, 189
mind of Christ, 96–97
self-interest, 357
teaching &, 703
causation
cosmos, 4
ethical, 95–97, 202, 213, 424, 724
guesses, 427
historical, 96–97
humanist, 77–78
"if . . . then," 452, 521
Kant, 91
individual/corporate, 161
metaphor, 238
New Testament, 840–42
providence, 94, 105
sanctions, 522
social, 621
statistics, 513–14
career (mine), 819–20
Carnegie, Andrew, 786–87
celebration, 357
central banking, 490–93, 603–4
centralization, 292–93
centurion, 389
ceteris paribus, 356, 686, 693–94
chains of reasoning, 255
chance, 133, 384, 514, 517–18
change, 693–94
charity
asymmetric, 392
dependence, 580–81, 785
division of labor, 785–88
dominion &, 780, 792
enemies, 781
hierarchy, 787–88
kingdom of God, 782
limits, 392
loans, 574, 850
marginal income, 788–90
metrics, 791
Pareto, 791–92

positive sanctions, 785
redemption, 780–81
rich young ruler, 782
self-interested, 782–83
skill, 787, 795–96
social insurance, 785–86
specialization, 795–96
state, 785
tastes change, 359
time, 795
tithe first, 794
chariots of fire, 14
Charles II, 600
charts, 287
Chicago School of economics, 76
Chilton, David, 754
China
Communism, 111, 429, 607, 629, 726
paper money, 471
patents, 669
tariffs, 372–73
choice
Alchian, 990
cost &, 303–5
economic, 62
economic growth &, 625, 652
free market, 303–4
freedom, 942–44
licensing vs, 643
money &, 325, 331
Robbins, 56, 984, 988–89
scarcity, 311
wealth &, 578
Christ (mediator), 16 (see also Jesus)
Christendom, 755–56, 836, 838
Christian Economics (book), xiv, 1–4
Christian economics
analytical categories, 68, 225
anti-autonomy, 62, 733
anti-central planning, 733
budgeting time, 184
categories (5), Part 2, 225–27, 240
covenantal (see covenant)
crackpots, 859
creation, 4–5, 154, 271
ethics (see ethics)
hand (5 digits), 225–27
law/economics, 124
laws, 80
practical agenda, 240
presuppositionalism (see presuppositionalism)
providence, 82
purpose &, 135–38
reconstruction of, 241
sovereignty of God, 25
starting point, 4–7
state (see state)
succession, 185
theory, 681–704
theory of sanctions, 743
theocentric, 130
Trinity, 68, 130, 143 (see also Chapter 1)
value theory, 166
wide-open field, 738
church
adoption, 832
benefits, 791
bride, 829
bride price, 243–44, 834–36, 839
donors, 791
dowry, 835–36
leadership, 395

loans, 852–56, 859–60
members, 239
marriage supper, 831–32
redeemer's world, 835
circular reasoning, 6
circulating elites, 616
circumcision, 249
cities of refuge, 965–66
class, 281–82
class struggle, 756
Clausius, Rudolph, 1028, 1031–32
clustering (populations), 581–84
Coase, R. H., 89, 285
Coats, A. W., 985
Coca-Cola, 666
coercion, 393
coins, 432–34, 451, 468–69
collateral, 484, 500, 573
Columbus, Christopher, 961–62
commerce, 581–84
committee, 2
common grace, 65
commodity futures, 584–85
commons, 318–20
communications, 266–267
Communism
China, 111, 429, 607, 629, 726
cyclical history, 1037–40
plan reconciliation, 429
science, 1037
competition
benefits, 150
buyers, 269, 407–8
complexity, 268
cooperation &, 268, 405–6, 419
dominion, 149
exchange &, 405
hostility to, 405–6
kingdom, 152, 196
knowledge, 552–54
market, 505, 650
nature of, 405–6
opportunities, 419
pre-fall, 354
pricing, 410–11, 448, 628
production factors, 559
quality, 419–20, 408–10
sellers, 406–8
zero sum, 196
complexity, 268, 704
compound growth, 185–87, 206, 215
computer programming, 232
computers, 623
conjectural history, 963
conquest, 863
conscription, 920, 928
consequences (unintended), xiv
conservation, 298, 954–55
consumer
authority, 79, 353–54, 393, 428, 688–89
ignorance, 645
inefficient, 329
negative sanctions, 641–42, 650
protection, 414–15
sovereignty, 79, 353, 688
specialization, 326
consumption
beyond, 686
falling cost, 327
hobbies, 329
inefficient, 326–29
leisure, 558
not sole end, 224
Smith, 326, 331, 351, 358

time, 327–28
contentment, 797–808
contingency, 1010, 1014
continuity
bride price, 843
change &, 239
division of labor, 218
ethics, 218, 272
God's kingdom, 755
inheritance, 223, 838
judicial, 217, 272
knowledge, 441
law, 217, 223
logic, 239
money &, 440–42
providence &, 134
small step, 710
social, 441, 752–56
contract
auction, 400–1
binding, 519
broken, 912–14
covenants &, 41, 249–51, 418
division of labor, 519
insurance, 519–21
not sacred, 418
predictability, 520–21
private property, 684
right of, 548
trusteeship, 250
cooperation
competition &, 268–69, 405–6, 419
curse &, 298
efficiency, 339
exchange, 344
free market, 247–48
injustice, 916
knowledge, 426, 444–45
love &, 393
prices, 63
self-interest &, 392–94
service, 419
Smith &, 390–92
specialization, 246–47
coordination, 63, 246–47, 391–94, 425, 447
copyright
Barlow vs., 670–72
beneficences, 672–73
"bottles," 672
data transmission, 678
enforcement, 673–74
history of, 670
Jefferson vs, 671
movie industry, 675
music, 673
nation-state, 678
print on demand, 678
printing press, 671
Queen Elizabeth I, 670
Renaissance, 680
rich authors, 674
years of protection, 678
copywriting, xiii–xiv
corporations, 60, 585–87
cosmic impersonalism, 123–24, 503
cosmic personalism, 62, 114, 154, 503, 705
cosmology
academia, 4
causation, 4
Creationism, 4, 132
Creator/creature, 123
impersonalism, 1032

heat death (see heat death of the universe)
Kant, 27
origins, 132–33
oscillating, 1043
personalism, 62, 114, 154, 503, 705
purpose, 133
theocentric world, 142
time, 107
cosmos, 4, 18, 24–25, 27, 41–42, 123, 1044
cost
biblical concept, 302–5
Buchanan on, 307–9
choice &, 303–8
counting, xi, 155, 160, 565, 692, 976
defined, 304
dialectical, 311
economic theory, 302
efficiency &, 331–32
expected vs. actual, 307
foregone use, 531
goals, 320
humanistic economics, 306–11
justice, 655
marriage vows, 305
objective, 309
opportunity, 619–92
planning, 154–58
price system, 329–30
prices, 66
reduction (prices), 329–30
search, 181–82
social, 285
revelation &, 302
scarcity, 65–66, 297–312
subjective only, 159, 307, 309–11
sunk, 309
theology, 302–3
counterfeiting
bank-issued money, 487–88
central banking, 493–94
fraud, 910–12
goods, 654–55
redistribution, 488
strategy, 464
trademark, 910–12
courts of appeal, 6–7, 29–31
Cournot, Sadi, 1033–34
covenant
blessings, 573–74, 617-19
broken, 912–14
capital &, 614–19
casuistry, 96
competition, 149
confirmation, 184
contract &, 41, 249–51, 418
courts, 6–7
economic theory, 39–40
five, 249
Genesis, 1–2
history's structure, 276
institution, 249–50
law, 619–20
national, 371
oath, 36, 37, 41, 249–50
philosophy, 16
predictability, 278, 520
responsibility, 147, 620
sanctions, 20, 26, 28–29, 31, 35, 37–39, 43, 124–25, 276–77, 521
success, 619–21
tithe, 779
covenant model

Deuteronomy, 36
economic theory, 39–40
five points (see five points)
Genesis 1–2, 46
hand (5 digits), 225
inescapable, 21
Pentateuch, 20, 36, 38
purpose/plan, 34–35
questions (5), 21
Sutton, 37
covenantalism, 195
counterfeiting
central bank, 491, 493–84, 496, 910–12
deception, 464
fraud, 909–12
private, 457, 469
state, 479, 481
trademark, 676, 679
warehouse receipts, 487–88
craftsmen, 231–32
creativity
algorithms, 117
artistic, 703
barrier to entry, 675
endless, 301
free market, 395
God's/man's, 55, 136, 141
innovation, 942
jobs, 117
main resource, 110, 271
ownership &, 261
results-oriented, 219
sequential, 249, 301, 529
Creator (Second Person), 243
Creator/creature, 26, 123, 135
creation
Christian economics, 154
cosmic personalism, 114, 123
finitude, 333–34
inequality, 289
Jesus, 140–41, 142
ownership, 131–32, 242–43
presupposition, 122–23
providence &, 132
purpose of, 140, 142–43, 212–13, 242–43
sequential (days), 353
sovereignty, 55, 122–23, 130
starting point, 4, 17, 154
Van Til, 14–15
week, 248–49
creativity, 261, 271, 301
credit
asymmetric, 585–87
blessing/curse, 573
collateral, 573
consumer, 595–96
covenant-keepers, 572, 574–75, 588
debt &, 573, 577
dominion &, 572
future-orientation, 575–76
General Motors, 595
government, 587
hierarchy, 573, 579–81
mortgages, 595
wealth transfer, 595
credit cards, 596, 727–28
creeds, 245, 1023–24
crime, 882–83, 898–99, 906–9
Crusoe, Robinson, 161–62, 255–58, 334–35, 628
curse
Adam, 110
blessing of, 151, 298–99

cooperation &, 150–51, 298
grace &, 298, 299
ground, 110, 297–98, 540
limits, 150–51
overcoming, 151
scarcity, 56, 151, 184
curves, 233, 715–16, 274
customers (service to), 64
cyclical history, 186, 1037--40
cymbals, 666

Dagon, 512
daily bread, 70
Daniel, 197
Darwin, Charles, 238
Darwinism
cosmology, 133
discontinuity (life), 134
Engels, 1038
Hayek, 24–25
heat death of the universe, 28–29, 153
inefficient, 324–24
Kant, 93
Mises, 24–25
purpose, 133–34, 137–38
purposelessness, 802
social, 25, 324–25
data (raw), 994
David, 201
da Vinci, Leonardo, 343–44
DDT, 956
death, 164–65
Deborah, 919, 922, 928
debt
accumulation, 499
asymmetric, 585–87
avoidance, 577
business, 594
charity, 574
consumer, 573, 580
co-sign, 637
credit &, 573, 577–79
credit cards, 596, 727–28
credit/debt, 577
forgiveness, 864, 869–71
government, 587, 606
jubilee, 869–71
legal bond, 578
mortgage, 577, 595
nations, 582–83
pledge, 637
poverty &, 580
present-orientation, 576
promises, 577–78
repayment, 167
slaves, 855–56
sabbatical year, 863–64
strangers, 574–75
subordination, 573, 575, 579–81
unfunded liabilities, 606, 610
Decalogue (two tables), 54
decentralization, 181, 303–4 669
decision-making
biblical law &, 199–200
final judgment &, 705–6
marginal utility, 702
new heavens, 805
questions, 163
deflation, 462
demand
changing, 569, 570
Keynesianism, 627–28
output, 551
price &, 203
reservation, 559–600

democracy, 203, 973
denarius, 548
detachment, 798–99
de Tocqueville, Alexis, 292
devil, 1003
diminishing returns, 314–21, 316–17, 540, 701
Dinah, 244
disciples, 810
discontentment, 148–49, 301, 804–5
discontinuity, 220–21, 759–60
discovery process, 300, 404, 501–11
disenchantment, 980
Disney, Walt, 803
disownership, 54, 271–72, 399, 402, 425, 550, 632, 683–84
distribution (see initial distribution)
division of labor
  Adam/Eve, 266
  autonomy vs., 334
  benefits, 333
  boundaries, 248
  continuity, 218
  contracts &, 519
  crime vs., 898–99
  Ecclesiastes, 265–66
  efficiency, 322–23
  eternal, 301
  family, 785–86
  increased wealth, 301
  intellectual, 304
  international, 49
  investment, 569
  Mises, 25
  money &, 440
  population growth, 215
  profit & loss, 393
  Rome, 433
  Smith, 246–47
  specialization, 265–66, 542
  supply & demand, 379
  Trinity, 333
  trust &, 468
Dolan, Edwin, 185
dominion
  competition, 149
  diminishing returns, 320
  discovery &, 507–8
  economic growth &, 66, 186, 221–22
  ethics &, 46, 210
  future oriented, 215–16
  hierarchy &, 215
  intellectual, 507
  opportunities, 507
  population, 271
  positive sanctions, 221
  providence, 575
  responsibility &, 508
  succession, 221–22
  tools, 208
  training, 792
  wealth, 792–93
  wealth transfer, 595
dominion covenant
  Adam, 42, 252–53, 364
  bride price, 835
  capital, 221, 837
  defines mankind, 252
  diminishing returns, 540
  eternal, 149, 244–45
  extension, 724
  future-oriented, 216
  hierarchy, 252
  history, 724

incentives, 361
inheritance, 270–71
more is better, 64, 361, 686–87
ownership &, 241, 261
post-resurrection, 836
productivity, 629
purpose &, 142
redemption by, 835
responsibility, 361
sin, 724
succession, 530
value-adding, 223–24
variable proportions law, 540
dominion religion, 1022–24
donations, 359–60, 392
dowry, 244, 831, 835–36
draft (military), 920
dream, 560, 563
driver's seat, 689
dross, 466
Drucker, Peter, 821
D'Souza, Dinesh, 793
dualism
economic theory, 991
Greek philosophy, 202–3
Heraclitus/Parmenides (see Parmenides/Heraclitus)
indeterminacy/determinacy, 1006
Kant, 91–93, 120–21, 984, 998, 1004, 1010
Knight, 1,012
letter/spirit, 197
mathematics, 100–2
micro/macro, 725–31
mind/matter, 100
Mises, 104–5, 999–1000, 1004
Mises/Friedman, 1015
nature/freedom, 998
nominalism/realism, 736
Parmenides/Heraclitus (see Parmenides/Heraclitus)
rationalism/irrationalism, 997
Duhem, Pierre, 661
DuPonts, 60

ecology, 867
economic growth
after 1800, 223–24
blessing, 67, 622
capital investment, 221
causes, 623–24
choices, 625, 652
compounding, 185–87
creativity (ingenuity), 110, 111
Deuteronomy, 612–14
dominion, 66, 125, 186
economic theory, 630
economists favor, 622
end of time, 125
ethics &, 615, 838
exponential, 215
gold standard, 625
graph, 215
land, 111
licensing vs., 643
limits, 110–12, 621–24, 629
long term, 601
mandated, 210
measurable, 612–14, 733
Mises, 22
Moore's Law, 111
natural resources, 109–12
normative, 186
opportunities, 506
population, 109, 125
saving, 215, 564–66

scarcity, 66
Smith, 97
statistics, 733
time, 109, 115–17, 125
tool, 630
zero-sum, 109
economic laws, 61–67, 78, 80, 682–704
economic theory (see also separate categories)
abstract, 357
aggregates, 336
atheistic, 7–8, 13
autonomy, 41, 53, 71–81, 622
behavioral, 355–57
blindness, 287
Buchanan, 984–85
cardinal/ordinal measurement, 204
casuistry, 233
causation, 77–78
ceteris paribus, 356, 384, 686,
chance, 133, 384, 517–18
charts, 287
Chicago School, 76
classical, 997–98
cosmology &, 4
costs, 302, 305–11
courts of appeal, 29–31
covenant model, 39–40
decision-making, 722
demand-side, 628
dialectical, 311
discontent, 148–49
disintegrating, 987
dualism, 736, 991
economics defined, 136, 787–91, 987–91
economic growth, 630
efficiency, 77, 279, 286–87, 291–92
elasticity, 720–21
epistemology, 85–89, 995
equations, 717–19
equilibrium, 172, 719–20
ethics, 71, 78, 208, 259, 431
experience &, 1006–7
faith, 994–95
five points, 122–25
free rider, 921–22
graphs, 708–17
"I, Pencil," 236
"If . . . then," 452, 521
incentives, 687–88
induction, 984
jargon, 715
judicial subordination, 45
Kant, 736–37, 976–79
Knight, 76–77
laws, 61–67
lines, 709
liquidity, 722
logic, 31–32
main insight, 392–93
mammon, 241, 622, 741
marginal utility, 702
market process, 737
mathematics, 88
mechanism, 721–22
methodology, 85–86
micro/macro, 723–24 (see also chapter 42)
models, 994
moral high ground, 202, 284
neoclassical, 171–72
neutrality, 21, 77, 988
New Left, 985–86

no free lunches, 704
nominalism, 227, 250–51
nominalism/realism, 58, 98–99, 195, 207, 224, 332
ownership, 283–84
Parmenides/Heraclitus, 356
physics as model (see chapter 41)
policy, 7–8
predictability, 61, 522
price, 709
price theory &, 209
principles, 681–704
providence, 425
psychology &, 804
purpose, 123, 132
rationality, 984
reconstruction, 3, 17, 130, 741
redemption, 129
responsibility, 722
rival views of market, 279–80
sanctions, 521–22, 743
scarcity, 47, 136
science, 234–35
self-interest, 521
sociology &, 722
supply-side, 628
tastes, 356–57
textbooks, 234–35, 493, 729
theocentric, 68
time limit, 109
treatises, 3
unchanging, 985–86
value-free, 46, 73–78, 286
value-laden, 70–81, 124, 199, 259
economic value
choices, 529
corporate, 100
ethics &, 99–100, 199
future, 529
imputation, 250
information, 344
intrinsic/historic, 459–60
marginal utility &, 341
measured, 204–05
opportunity, 530
price, 199–204
subjective/objective, 200–1
value paid, 551-52
wisdom, 435
economics (defined), 136, 787–91, 987–91
economists
communication, 717
disagreements, 235
faith in laws, 61
message, 286–87
number of, 13
policy-making, 75
presentations, 34
salesmen (poor), 286–87, 431
self-interested, 121–22
special interest groups, 77
students, 233–34
tax funding, 121
virtuosos, 235
economizing, 226, 351–61
Edom, 313, 433
education, 81
efficiency
consumption, 326–29
cooperation, 339
cost, 331–32
definition, 325
division of labor, 322–23
double-entry bookkeeping, 325

economic theory, 279, 286, 291–92
law of, 341–42
money, 330
production, 324–26
Rothbard vs., 332
specialization, 330–31
standard, 77
subjective/objective, 330
temporal, 79–80
waste &, 325
Western Europe, 325
worldview &, 330–31
Egypt, 560–62, 931–32
elasticity, 647, 720–21
Elihu, 277
Elisha, 13–14, 378–79
eminent domain, 966–68
empire (Mosaic Law vs.), 922–27
empiricism, 1001
employees, 552
employment, 501–4
ends/means, 55, 62, 148, 354–55
endurance/setbacks, 805
Engels, Frederick, 1037–38, 1039
Enlightenment, 600
entertainment, 328
entrepreneurs, 169, 748–49
entrepreneurship
ability, 437
competition, 221–22
deceived (inflation), 602–3
discontinuity, 220–21
expectations &, 219–20
failures, 803
final judgment &, 509
forecasting, 152, 157–58, 219–21, 571
gambling vs., 518–19
garden of Eden, 159
guesses, 427
imperfect knowledge, 511
inescapable, 172–73
Joseph, 561–63, 570
Knight, 172
Mises, 172, 219–23
neoclassical economics, 171–73
optimism, 424–25, 801
private property &, 509
profit/loss, 522
profits, 216
sanctions, 218–21
savings &, 566, 570–71
secrecy, 437
specialists, 267
specialized knowledge, 569
stewardship parable, 525 (see also talents)
uncertainty, 522, 525
entropy, 14, 1031, 1034, 1039, 1041, 1043–44
envy, 290–92, 751–52
epistemology
battle, 119
Christian, 97
defined, 984
economists vs., 106, 995
ethics, 208
humanism's, 976–78
imputation, 104
inferiority complex, 84
intuition (see intuition)
judgment, 104
Kant (see Kant, Immanuel)
lack of interest, 85
mammon, 106

market process, 208
mathematics, 102
meaning of, 15
methodology &, 85–89
mind/matter link, 100–3, 1014, 1016–17
Mises, 85–86, 104–5
neutrality (see neutrality)
origins, 27
presuppositions, 83
providence, 133–35, 226
Van Til, 995–96
Wigner, 9, 10, 100, 104, 994
equality, 292–95, 428
equations, 717–19
equilibrium
gas, 1028
Hayek on, 443–44
Mises, 537, 719–20
mythical, 384
neoclassical economics, 72
omniscience, 301
prices, 205, 208–9
uncertainty, 209
universe, 1030
Erewhon, 113
Esau, 313–15
escapist religion, 1020–22
eschatology
Bible, 107
Christendom, 836
dowry, 836–38
kingdom of God, 107–8
prices &, 205, 208
progress, 599–600
purpose &, 153
rest, 762
view of nature, 1026
views, 754–55
wealth transfer, 196
eternal life, 1022
eternity, 244–45, 300-1, 592, 747, 749
ethics
biblical law, 199
boundaries, ch. 8
causation, 71, 95–97, 202, 213, 424, 723
central to analysis, 259
civil law &, 430
continuity, 218
conquest by, 1023
criteria, 197–98
dominion &, 46, 210
dominion vs. power, 1019–20
economic growth, 615, 838
economic theory &, 71, 78, 208, 259, 431
economic value, 99–100, 199
epistemology, 208
guidelines, 453
honest money &, 452–53
imputation, 208
justice &, 197–98
legal order &, 430
market process &, 431
micro/macro,723–25
ownership &, 283–84
predictability &, 424, 523
redistribution, 286–87
responsibility &, 59, 704
sanctification, 191
self-interest &, 77
Smith, 614–16
standards, 198–99
steward (talents), 158

stewardship, 176
success &, 723, 725, 841
theft, 175
trust (document), 175–76
value, 99, 197–98
Eve (Satan &), 274
evenly rotating economy, 718–19 (see also equilibrium)
evaluation, (see imputation)
evolution
algorithms, 115
digital, 113
fixed categories vs., 1000
flux, 90
Hayek, 290, 477
humanism, 114
language, 262
leap of being, 112–13
presupposition, 24
purposeless, 133
exchange
barter, 343
cooperation, 338–41, 344
competition &, 405
equality, 428
knowledge, 340
motivation, 339–40
wealth, 340–41
exclusion, 56–57, 176, 182–83, 259–60
expectations, 219–20
experience, 1004–5, 1006
exploitation, 590, 689
exponential curve, 215
exports, 373–76
externalities, 319
eye for eye, 851, 909, 915
facts, 307
facts/ laws, 991–92, 996, 1012–13
faith, 1003–4, 1005
fall, 255, 297
false steward, 838
family
Abraham, 770
adoption (grace), 760–61
advantages, 619
bride price (see bride price)
charity (USA), 359
covenant, 6, 38, 249
Crusoe, 256
disinherited, 142, 755
division of labor, 388, 785–86
economists avoid discussion, 135
free market &, 901
future-oriented, 216
influence, 216
inheritance (fall), 281
insurance, 516
non-market, 267
owned by God, 56–57
ownership, 271
protection agency, 825–26
regression to the mean, 585
sacrifice, 64, 199, 393
society &, 361
wealth, 151
famine, 378–79, 648, 931–32
farmer (rich), 51
feast, 925–26
Federal Register, 636
Fertig, Lawrence, 820
feuds, 952–53
fiduciary, 250
field (rich farmer), 51

field owner, 399–400, 501–4, 548–50, 631–33
Filioque, 246
final judgment
  decision-making &, 705–6
  God's final declaration, 6, 30
  entrepreneurship &, 509
  eschatology, 109
  heat death, 1032, 1042
  individual, 836–37
  justice, 905
  limited time, 317
  prices &, 205
  responsibility, 705
  rich/poor, 591
  sanctification, 97
  stewardship parable, 737
Finley, M. I., 888
finitude
  creation, 333–34
  discovery process, 300
  economic growth, 621–22
  ends/means, 354
  escape from, 45
  garden of Eden, 297
  interest, 528–29
  scarcity, 148, 151, 163, 299, 301
fire, 949–50, 957
five points
  covenant, 122–25
  Deuteronomy's structure, 36
  economic categories, 129
  economic laws, 61–67
  economics, 35, 39–41, 121–25
  judicial (representative), 47–53
  judicial (theocentric), 41–47
  Mendenhall, 27n
  Pentateuch's structure, 36
  social theory, 129
  stewardship laws, 53–60
  Sutton, 37
  Unconditional Surrender, 38
flood (Noah), 151
foolishness, 22–23
footstool theology, 799–800
forecasting
  production, 381–82
  subjective/objective, 160
  uncertainty, 525–26
  wrong, 571
  see also entrepreneurship
fractional reserves, 484–86, 499–501
framing, 355–56
Frankenstein, 998
Franklin, Ben, 724
fraud, 909–10, 468
"free," 685–86
free banking, 471–77
free market
  auction, 236, 399
  autonomy, 901, 940
  biblical law &, 295
  benefits, 241, 395
  bidding for knowledge, 182
  choices, 308
  consumer authority, 79
  coordination, 247–48, 447
  costs/benefits, 303
  critics, 289–90
  decentralization, 303–4
  dependent, 395
  design, 446–47
  falling prices, 629
  goal (#1), 435
  gold standard, 477

greatest benefit, 241
inequality, 292–93
information, 304
justice, 395
kingdom competition, 152
mechanism, 239
morally legitimate, 399
inequality, 292–93
not autonomous, 901, 940
sanctions, 304
service, 388–96
size, 504–5
social organization, 395
state &, 902, 973–74
free rider, 921–22
free trade
benefits, 366
borders &, 367–69
Knight, 1011
liberty, 376–77
logic, 367–69
Mosaic law, 582–83
mutual benefit, 750
one/many, 366
productivity, 365
Smith, 152
specialization &, 364, 376
wealth, 150
free will, 1010
freedom
academic, 121
captives (jubilee), 856–57, 874–76
choice &, 269, 625, 942–44
economic growth, 625
economic resource, 111
Egyptians, 735
ethics, 76
gold coin standard, 458
Kant, 28, 84, 91–94, 120, 125, 167
Knight, 76
political, 390
revolution, 293
rule of law, 290
wealth &, 618
Friedman, Milton
economic model, 993
facts/laws, 993, 995, 996
intuition, 994, 995
judgment, 994
Kant &, 992–93
mathematics, 993
Mises &, 1014–15
neutrality, 990
predictions, 992
"real world," 994
Frisch, Ragnar, 726, 994
future (money &), 447–48
future-orientation
credit, 575–76
dominion &, 215–16
resource allocation, 173–74
service, 218
society, 559
training, 576

Galbraith, J. K., 717
Galton, Francis, 616
gambling, 518–19
game (zero sum), 366–67
garden, 44, 159, 258, 539
Gates, Bill, 786–87
GDP, 204, 206
genealogies, 833
General Motors, 595
generosity, 392
genocide, 864

Georgescu–Roegen, Nicholas, 86
German Historical School, 991
Gesell, Silvio, 535
Gibeonites, 197
Gnosticism, 1023–24, 2021
goals
  action plan, 351
  budget, 351
  business, 748
  capital &, 355
  costs, 320
  economizing, 351
  hierarchical, 162
  incentives &, 688
  kingdoms, 748
  long lost, 163–164
  plan reconciliation &, 427–28
  time vs., 183
goods, 165–66, 566–68, 860
God
  Abraham's negotiations, 348–50
  academically irrelevant, 29
  blindfold, 450
  causation,77– 78
  creation (see creation)
  death of, 1042
  delegates ownership, 42–43
  dominion, 45
  evaluates performance, 44–45
  fear of, 129
  hierarchy, 147
  image of, 114, 206
  imputation by, 57, 131, 166, 312, 705–6, 736
  infinite, 300
  interpersonal comparisons, 169
  Job's question, 134
  mandates growth, 45–46
  meek before, 211
  mind, 15, 18
  Mises on, 1008–09
  name, 54, 176–77
  negotiator, 346–50
  omniscient, 503
  orderly mind, 239–40
  Owner, 41–43, 130–31, 242–43, 253, 631–32, 681–82
  perfection, 145–47
  plan reconciliation, 143
  predictability, 514
  prohibits theft, 43–44
  providence (see providence)
  purpose, 132, 141–49
  sovereignty, 25, 42, 53, 79, 122–24, 129, 130, 191–92, 226, 347, 365
  sovereignty (judicial), 141
  sovereignty/providence, 133
  tradeoffs (none), 131
  transcendence, 18, 43
  tree of life, 44
  unchanging, 239–40
Gödel, Kurt, 993
gold
  century of, 473–74
  confiscation, 477
  historic value, 459–60
  interest rate &, 544–45
  intrinsic value, 459–60
  legitimacy of state, 477
  mining, 459
  monetization by state, 477
  money &, 456–59
  Nixon, 494–95
  solidus, 470–71

standard, 459, 470–71, 472–73, 475–77, 625
Goodrich, Pierre, 787
Google, 685
Gorbachev, Mikhail, 9
grace
bride price, 830
Calvary, xii
centurion, 389
common, see common grace
curse &, 298–99
dominion covenant, 784
faith, xi
knowledge, 257–58
law &, 1016
mercy, 288
nations, 619
precedes law, 253–54, 760–61
salvation, 760–62
trees, 258
unearned benefits, 282
grace to wrath, 256
grain, 562–63
graphs, 233–34, 708–17
Great Commission, 61, 620
Great Depression, 326–327, 606–07
Great Lakes, 543
Greece, 879–80
Greeks (myth of neutrality), 29
Greenback Party, 597
Gresham's Law, 460–61
Gribben, John, 1036–37
Gross Domestic Product, 204 206
growth
blessing, 67
compounding, 185–87
covenantal, 208, 223
criteria, 224
dominion, 45, 186, 214–15, 221–22
economists favor, 97
ethical progress &, 186
exponential curve, 215
God mandates, 39, 45–46, 186, 207, 210
Hebrew idea, 186
legitimate, 67, 98
limits, 19, 107–18, 125, 215
normative, 186
population, 63–64, 214–15
post-1800, 215, 223
reduces scarcity, 40, 66–67
stewardship &, 54
wisdom, 59, 211
see also economic growth
guardians, 474–76
guardianship, 40, 54
guesses, 427
Gutenberg, Johann, 671

Halberstam, David, 987
Hardin, Garrett, 318
half-life, 985
harm, 658–60
harmony of interest, 263, 402–4
Harrod, Roy, 75, 251
Havilah, 456, 541, 542,
Hayek, F. A.
Darwinist, 24–25
equilibrium, 443–44
evolution, 290, 477
inequality, 290
Keynes &, 443
knowledge, 44–46, 425–26, 443–47

omniscience, 443
precise writing, 982
prices & information, 63
reason, 991
social evolutionist, 446
worst get on top, 294
Hazlett, Henry, 641, 738
healing (priesthood), 415–18
heat death of the universe
"at last," 1030
Clausius, 1033
death of God, 1042
eschatology, 107
final judgment, 1032, 1042
humanist myth, 14
impersonal, 29–30, 1032
imputation, 153
Jeans, 1018
meaning vs., 212
purposeless, 153
see also entropy
heat loss, 1029
heat sink (cosmic), 1030
heaven, 72, 299
hedonic ratchet/treadmill, 626–27, 806–7
heirs, 59
hell, 80, 299, 886–87
Heraclitus, 67, 240 (see also Parmenides/Heraclitus)
Herbert, Nick, 1025
Herod, 432
Herodians, 432
Hershey, Milton, 803
hierarchy
authority &, 260–61
charity, 787–80
debt, 579–81
dependence, 581
dominion &, 215
dominion covenant, 252
goals, 162
multiple, 386
pin factory, 247
religious organizations, 313
stewardship, 244
Trinity, 247
valuation, 192–95
wealth, 789
high bid wins
calling, 820
distribution &, 398
economic law, 688–89
judicial principle, 155
love &, 394
market process, 201–2, 381, 393, 398–402, 688–90
morally legitimate, 401, 648
politics vs., 247
value theory, 201–2
high priest, 774
higher consciousness, 2021
Hippocratic oath, 416, 662
Hiram, 362–65
historiography, 207, 1002
history, 107–10, 217, 276, 299, 1038
hobby, 329, 342
Holy Spirit, 333
Honest Money, 453
honest money
Byzantium, 463
ethics &, 452–53
false weights, 451
historic value, 453
Mises, 610
policing, 463

private agencies, 454
ownership laws, 451
state monopoly vs, 451, 454–55
steps (4), 477
weights/measures, 450, 463
honeybees, 659
Hoppe, Hans-Herman, 694
Hubble, Edwin, 1018–19
Human Action, 3
humanism
autonomy, 47
Big Bang, 133
card shark, 14
causation, 77–78
chance, 133
cosmic parasite, 1042
cosmic impersonalism, 240
cosmology, 132
death & resurrection, 1040–43
dualism, 89–90
economic theory, 14, 67, 80, 97–98, 741–42, 976–77
epistemology, 976–77, 984–86
evolution, 114
funding, 81, 122, 126
god by default, 114–15, 124
heat death of the universe, 1040–43
hopelessness of, 981
Kant (see Kant, Immanuel)
man as a god, 53
manifesto, 123
metaphors (2), 238–39
presoppisitions, 125–26
purpose & sovereignty, 137–38
scholarship, 14
starting points, 123, 126
two points, 123
value, 202–4
Van Til, 14–17
humanistic economics, 14, 67, 80, 97–98, 741–42
Hutt, W. H., 79, 353, 688
hyperinflation, 480, 498

"I, Pencil," 236, 738
ice age, 117
idea
discover, 655
judicial boundary?, 657
sharing, 659–60, 665
theft, 665
trail of title, 657
ideas (changing), 974
"if … then," 61, 521
ignorance, 508–9, 553
illegal sales, 974
imitation, 216–18
imperfect justice, 905–7, 916
imputation
accountability, 189–90
Calvinism, 191
casuistry, 189, 207, 357, 427
category 4, 227
central idea, 207
coherence, 120
constant, 192
count the costs, 207–8
death, 44
discovery process, 508
economic value, 207
epistemology, 104
future value, 529
God, 57, 100–1, 166, 248, 312, 705–6
heat death, 153

income stream, 544
judgment, 104, 253
judicial, 44, 190–91
kingdom of God, 196–99, 207
Menger, 227
motivation, 55
performance, 189
principles, 103–4
statistics, 206
subjective, 166, 736
Trinity, 168, 250
trusteeship, 57
valuation, 191–95
value &, 200–1
wealth, 206
incarnation, 780–81
incentives, 687–88
inclusion/exclusion, 57
income, 544, 616
indentured servitude, 878, 879–80
index number, 224, 227
indexing, 3, 613
India, 793
Indians (U.S.), 965
individualism, 334–36, 339
Industrial Revolution, 150, 412–13, 557, 623–24, 763–64, 887
inequality
capitalism's critics, 289–90
creation, 289
eternal, 208
legitimate, 226
mercy, 288–92
Nisbet on, 293–94
Pareto's Law, 117
super-rich, 751–52
universal, 288–89
inflation
business cycle, 602–3
"flexible" money, 478
hyperinflation, 480, 498
Mises, 602
tax, 469–70
information
bidding for, 506–7
cost of, 111
costs declining, 622
decentralized, 181, 425–26, 443–47, 570
economic growth, 345
entrepreneurship, 436–37
free, 685
Hayek on, 425–26, 443–47
local, 339
market process, 344, 504–6
patents, 668
prices, 63, 329–30, 435–37
search for, 436
sharing, 661–62
specialists, 428
value of (high), 344–45
see also knowledge
ingots, 466–67
inheritance
Adam, 278
bride price, 834–36
conflict, 281–83
continuity, 223, 838
covenant-breakers, 784
death, 212
descendants, 270–71
dissipation, 59–60
dominion covenant, 270–71
eschatology, 212
grandson, 750
kingdoms, 751

kingdom of God, 153, 212
meek, 109, 260–12, 833
posthumous, 222
post-resurrection, 835
predestination &, 213
private property, 211
problem, 153
purpose, 153
sanctions &, 221–22, 572
stewards, 835
succession, 212
tithe, 771
trusteeship, 211
wisdom &, 211, 843
initial distribution
Adam, 283
exchange, 272
garden, 258
knowledge, 262
responsibility, 253–54, 272
injustice, 914–16
innovation, 113, 617, 663 (see also creativity)
insect abatement, 955–56
institutions, 249–50
insurance, 18, 515–18, 645
integrity, 981
intellectual property, 654–79
interest rate
Aristotle on, 534, 857–58
Carthage Council, 852–53
church, 852–54, 857–58, 859–60
discount for time, 528--32, 544–45, 858
Second Lateran Council, 853
false signal, 603
finitude, 528–29
free storage, 700
inescapable, 858–59
Jesus on, 524–28, 849–51
legitimate, 524–25, 534–35
mathematics, 545
Mises on, 537, 602
Nicea, 852
Noonan, 889
opportunities now, 529–30, 532–33
opposition, 889
originary (Mises), 537
poor believer, 854–56
Pope Benedict XIV, 853–54
prohibition, 847, 857–58
responsibility now, 529
Second Lateran Council, 853
sooner, not later, 530
Third Lateran Council, 853
internet, 345
interpersonal comparisons, 58, 168–69, 195, 352, 453
intervention, 201–2
intuition
autonomy, 1015
economic theory, 984
Friedman, 994, 995
Kant, 427
Knight, 1012
Mises, 1004
neutrality, 1014
Parmenides/Heraclitus, 357
policy-makers, 453
Van Til, 996–97
inventions, 327, 666–677
investing, 270, 569
Invisible Hand, 7, 431
irrationalism, 92
Isaiah, 465–67

Israel
death of, 834
divorced, 833
dowry of, 832–34
eminent domain, 966
evangelism, 927
Pharisees vs. Sadducees, 822–23
roads, 966–67
Rome, 832–34
state, 480
warfare, 925–27
Israelites, 841

Jack of all trades, 343–44
Jacob, 771, 823
Jaki, Stanley, 1633–34
jargon, 715
jealousy, 290–92
Jeans, James, 1018
Jefferson, Thomas, 671
Jeremiah, 765, 863
Jesus
blood avenger, 972
Bridegroom, 828, 830
calling, 810–11
centurion &, 389
charity, 744, 780–96
coin (tax), 432–34
cooperation, 390
creation, 140–41, 142
crucifixion, 805
denarius, 432–34
disciples, 810
eye for eye, 915
faith vs., 249
field owner, 399–402, 548–50
Herod, 432
high priest, 773
incarnation, 780–81
interest, 524–28, 849–51
jubilee, 856–57, 868–69, 874–75
kingdom, 243–44
laborers (see field owner)
lending, 850
Lord's day, 757–58 (see also Lord's day)
Lord's prayer, 745–46
market coordination, 392, 447
marriage supper of the lamb, 244 (see also bride price)
mind of Christ, 96–97
miracles, 397
New World Order, 876
Owner, 243, 251
Pilate vs., 82–83
pocketbook parables, 145, 286
ransom, 829–30
recruits, 555–56, 810
Redeemer, 144, 828
redemption, 244
resurrection, 800
rich young ruler, 782–83, 789
sabbath, 757–68
seed/weeds, 108–9
service/leadership, 419
sin-free, 205
slavery, 875–76
social continuity, 752–56
steward, 243, 524–28, 583–84, 589–92, 687
talents (see talents/minas)
travel speed, 413
turn the cheek, 851
trustee, 50
two kingdoms, 744–56
uneasiness, 805

wages, 556
wealth teachings, 747
wheat/weeds, 752–54
wine-making, 397–98
work, 558
Job (person), 273–78, 802
job
calling &, 117, 811–13
importance, 816–17
replaceability, 816
rules of thumb (3), 815–16
scholarship, 820
Joshua, 960–61
Joseph, 421–23, 560–63, 566, 803, 932
Joseph's brothers, 421–23
jubilee year
annulled, 856–57, 886
creation week, 862–83
debt forgiveness, 864, 869–71
genocide, 864
Jesus &, 856–57, 868–69, 874–75
land laws, 766
New Testament, 869
Pope John Paul II, 870, 890–91
sabbatical years, 766, 863–64
walled cities, 766, 884
judgment
constant, 192
economic, 683–84
epistemology, 21
final (see final judgment)
Friedman, 994
heat death, 1032
see also imputation
Judas, 291, 877
just-so stories, 437–39, 963
justification, 191
justice
costs, 655
counterfeiting, 910–12
ethics &, 197–98, 202
final judgment (see final judgment)
frauds, 909–10
free market &, 395
goddess, 450
imperfect, 905–7, 914–16
inequality &, 290
omniscience, 905–6
perfect, 954
price of, 916
restitution, 880–82
rule of law, 290
state, 900
Justin (martyr), 758

Kahneman, Daniel, 235
kairos (special time), 975
Kant, Immanuel
academia &, 84, 120–21
causation, 91
cosmology, 27
Darwinism &, 93
dualism, 91–93, 120–21, 984, 1004, 1010
economic theory, 106, 736–37, 976–77
epistemology, 120
freedom, 91–92
God, 146
Friedman, 992–93
intuition, 427
issues, 84
Knight &, 1011

Mises &, 27–28, 93–94, 999–1002, 1005–6, 1014–15
mysticism, 981, 1006
noumenal, 981, 1014
responsibility, 92
tastes, 167
things-in-themselves, 1014
Van Til &, 89
Kelvin, Lord, 1033–34
Kennedy, John F., 986–87
Keynes, John Maynard
central planning, 732
crank, 535–36
deficits, 604
German edition, 732
Hayek &, 443
"ifs," 330–31
interest rate (zero), 535–36
mathematics, 714–15
Samuelson &, 726–28
Say &, 382–85
thrift, 222
Keynesianism
assumption, 726–28
consumer demand, 627–28
credit card analogy, 727
policy justification, 730
rising prices, 627
socialists vs., 279
king, 903–4
kingdom of God
capital, 67
charity &, 782
competition, 196–97
continuity, 755
covenants, 583
eschatology, 107–8
extension, 196–97, 761
funding, 72
imitation, 216–18
increased, 257–58
inheritance &, 212, 222
monopoly, 550
production &, 224
succession, 222
valuation &, 200
value, 196
kingdom of priests, 772–73
kingship, 929–30
Kirzner, Israel, 715–16, 988
Kline, Meredith, 37
Knight, Frank H.
atheist, 146
common sense, 989
dualism, 1011–12
economics defined, 985
entrepreneurship, 172
free will, 1011
freedom, 76
intuition, 1012
Kantian, 1011
mind/cosmos, 1011–12
policy-making, 76
predictions, 1012
theory/facts, 1012–13
knowledge
accurate, 263
Adam, 300
allocation, 163–64
bidding, 182
bureaucrats, 642
competition, 552–54
continuity (money), 440–42
coordination, 426, 444–45
creativity, 271, 301
crucial resource, 301, 434–35

decentralized, 181, 425–26, 443–47, 511
distribution (initial), 182
eternity, 300, 507
exchange, 340
exhaustive, 300, 302, 724
finitude, 333–34
God's, 300
grace, 257–58
Hayek on, 44–46, 425–26, 443–47
imperfect, 549
increasing, 223, 507
individual, 181–82
land &, 547
limited, 111, 115–17, 171
ownership, 633–34
ox, 634–35
perfect, 511
power, 255
premature, 255
price of, 182
profits &, 436
questions (eternal), 507
reduced cost, 522–23
responsibility &, 434, 635–37
scarce, 300
specialization, 181, 266, 333–34, 342
temptation, 262
wealth creation &, 262–63, 546
Kroner, Richard, 89, 1-14
Kuhn, Thomas, 999

Laban, 823
labor
capital &, 554–57, 559
competition, 552
factor of production, 558
field (parable), 399–400, 501–4, 531–33 (see also field owner)
legitimate, 81
mixed, 864
ownership, 503, 549–50
pricing, 551–54
specialized, 554–56
unemployment, 556
versatile factor, 551, 558, 568–69
lake of fire, 299
land
Abraham/Lot, 313, 349
conquest, 871, 962
depletion, 541–42
diminishing returns, 314–16
eminent domain, 966–67
"free," 318
interest rate &, 544–45
Jacob/Esau, 313, 315, 321
knowledge &, 547
New Testament, 866–68
ownership, 960–65
pre-fall, 540–43
primary resource, 547
rest, 868, 871
sabbatical year, 871
scarcity, 313–16
schoolmaster (pre-1900), 547
search for bargains, 542–43
state, 965
tragedy of the commons, 318–20
value, 540–41, 885
variable proportions law, 315
landmarks, 182–83
language, 262, 438
last rites, 417
law

administrative, 636, 934–36
arbitrary, 637–39
boundaries, 176
case laws, 822
civil/criminal, 906–7
complexity, 637–39
consumer authority, 690–91
continuity, 217, 223
diminishing returns, 540
economics (see economic laws)
equality before, 279, 290, 930–33
ethics &, 430
fraud, 905–10
grace &, 1016
grace precedes, 253–54, 760–61
high bid wins, 688–89
imperfect, 905–6
king &, 903–4
kingship, 930
letter/spirit, 197
marginal utility, 702–3
no free lunches, 685–80
opportunity cost, 691–92
people exploit opportunities, 696–98
precedent, 63
predictability, 915, 932–34, 945
roads, 965–68
rule of, 279, 290, 903–5, 930–33
sooner/later, 698–99
supply & demand, 689–90
unintended consequences, 641, 644–95
variable proportions, 540, 701–2
lawyers, 343
leadership, 386, 395
leap of being, 112–13
Lebanon, 362–65
legacy, 222
legal order, 430, 451
legitimacy, 295–96
leisure, 327, 557–58, 626
lender, 484, 532–33 (see also loan)
leprosy, 948–49
Letwin, William, 7, 80, 259,988
leverage (two way), 584–85
Levi/ Matthew, 810
Levine, David, 664
Levites, 871–72, 933–34
Lewis, C. S., 756, 1006
Lewis, Michael, 235
Lewis, W. H., 818
lex talionis, 851, 909, 915
liberalism, 987
libertarianism, 179–80, 187, 970
liberty, 376–77
licensing, 415, 643–46
life extension, 116
life expectancy, 305
life insurance, 305
life (origin), 133
lilies, 72
limit to growth, 115–17
linear history, 186, 599, 618, 1033–34
Linnaeus, Carl, 178
lion's den, 197
liquidity (money), 353, 722
litigation, 668, 906
loaded dice, 514
loan, 483–85, 533, 850, 852–54, 859–60, 889 (see also credit)
Locke, John, 963
logic, 23–24, 239
logs, 315
Lord's day

anti-autonomy, 761
businesses, 763–65
enforcement, 764
execution, 758
first day, 757–58
Industrial Revolution, 763–54
Justin (martyr), 758
rest, 762–63
Sabbath &, 759–60, 765–66
wealth &, 767
worship, 863
Lord's prayer, 745–46, 793
loss, 310, 377-18, 659, 697
Lot, 313, 348–49
love, 204, 393, 394
luck, 385
lunches (free), 685–86
luxuries, 410–11

Mach, Ernest, 1040
machines, 112–14
Machlup, Fritz, 85–86, 259, 985
mammon
barn builder, 136
common grace, 65
conflict, 741
consumption, 686
economic theory, 241, 622, 741
epistemology, 106
Greek meaning, 746–47
inheritance, 158
kingdom, 152–53, 591
more, 148, 149
self-love, 394
self-worship, 64
servitude, 877–78
Smith &, 331, 741
wealth, 135–36, 837
management, 509–10
marginal utility
abstraction, 359
addictions, 360
allocation, 162
charity &, 359, 788–89
discovered by, 358
donations, 359–60
economic law, 702–3
"enough is enough," 341
entertainment &, 328
expected, 551–62
inventory, 341
luxuries &, 410–11
priorities, 358
subjective, 341–43, 358–59
timeless, 359
wealth allocation, 358–59
marginal value, 341, 692–93
marked cards, 14
market process
allocation, 210–2
competition, 505–6
critics, 404–8
discovery process, 404, 501–4
epistemology, 208
ethics &, 431
faith, 607
high bid wins (see high bid wins)
imperfect knowledge, 549
information, 344, 504–6
laws, 61, 78
miracle, 425
personal, 503
plan reconciliation, 426, 504–5
predictability, 522–23
price system, 505
private property, 447

sanctions, 428
Satan vs., 379
self-love, 394
self-regulating, 428
service, 396
transfer of responsibility, 271
marketing, 286
marriage, 305–6, 824–26, 922–23 (see also family)
marriage vows, 305, 306
Marshall, Alfred, 1013
marshmallow experiment, 576
Marx, Karl
Christianity, 629–30
class struggle, 756
class undefined, 281–82
Ph.D., 818
philosophy, 8–9
religion of revolution, 255
Smith &, 725–26
Marxism, 224, 255, 278–80 (see also Communism)
Massimi, Michela, 120
master, 824–26
mastery, 232–33
mathematics
Friedman, 993
foundations, 102–3
Poythress, 100–3
risk calculations, 172
Sebba, 997–98
Wigner, 18–19, 994
Matthew/Levi, 810
McCloskey, D., 623–24
meaning, 212
mechanism, 238–39, 447, 721–22
meek, 109, 210–12, 833
Melchizedek, 347, 770, 775
Mendenhall, George, 37
Menger, Carl
imputation, 227
imputed value, 193–95
interpersonal comparisons, 75–76
marginal utility, 358
monetary theory, 353
nominalism, 57–58, 195, 227
mentor, 217, 233
mercantilism, 338
mercy, 288
metaphor
Big Bang, 236–37
"I, Pencil", 236
machine, 238, 721
Nisbet on, 237–38
organism, 238–39
metaphysics, 132–35, 154, 226
metaphysics (Mises), 1009
methodological covenantalism, 732–33
methodology
atheism, 145
epistemology &, 85–89
ignored, 985
Mises, 707
neutrality, 986
Van Til, 996–97
Michal, 201
micro/macro, 723–34
microcomputers, 111
Middle Ages, 660–61
migration, 542–43
Miller, Roger, 185
minas, 49
mind/matter link, 1014, 1016–17
mining, 459
mint, 457

miracle (mathematics), 19, 88, 94, 105
mirror, 117
Mischel, Walter, 576
Mises, Ludwig von
  a priorism, 31–32
  autonomy, 27–28, 1,002
  axiom of action, 55
  bureaucracy, 510, 936–40
  business cycle, 601–3
  career, 818–19
  conscription, 928
  contingency, 1011–12
  copyrights, 658
  Darwinist, 24–25
  deductivism, 999, 1001
  devil, 1003
  discontentment, 804
  division of labor, 25
  dualism, 999–1000, 1004–7
  economic calculation, 30–31, 63, 339
  eminent domain, 967
  empiricism, 1001, 1006
  entrepreneurship, 172, 219–21
  equilibrium, 537, 719
  ethics, 352
  evenly rotating economy, 718–19
  evolution, 1000
  experience, 1004–5, 1006
  facts/theory, 1006–7
  faith, 1003–5
  free will, 1010–11
  freedom, 1009
  Friedman vs., 1014–15
  "God hypothesis," 1008–9
  graphs, 233–34, 708
  harmony of interests, 402–3
  historical sciences, 1002
  human action, 707–8
  if clause, 1005
  intuition, 1004–5
  Kant &, 27–28, 93–94, 999–1002
  legal protection, 900–1
  liberalism, 1007
  logic/reality, 104–5
  market/auction, 236
  meaning, 1002
  metaphysics, 1009
  methodological atheism, 145–47
  methodological collectivism, 729
  methodology, 85–86, 707
  national defense, 920
  nature/freedom dualism, 1005, 1010
  neutrality, 74, 352, 988, 1002–3, 1007, 1008
  optimism, 801
  Parmenides/Heraclitus, 999–1000
  patents, 658
  physics, 717–18
  polylogism, 369
  pragmatism, 1000
  praxeology, 74
  presuppositions, 1003–4
  profits, 219–20
  psychology, 1009–10
  purpose, 55, 147
  rationalism, 146
  reason, 105
  social Darwinism, 25
  state, 914–15, 920–21, 940
  subjectivism, 352
  time preference, 532
  Trinity, 1009
  uneasiness, 805

utilitarian, 351–52
value-free economics, 73–74, 352, 1007
Western civilization, 1008
Windelband, 93–94
models, 994
monasteries, 660–61
monetary theory, 497–98
money
bank-issued (see-bank issued money)
bargaining, 504
bimetallism, 450
borders &, 374
calling, 820
central function, 448
choices, 325, 331
consumer authority, 79, 353–54, 393
continuity, 440–42
contraction, 488–89
counterfeit (see counterfeiting)
currency, 495
debasement, 465–67, 477
division of labor &, 440
dross, 466
efficiency &, 330
exchange, 340–41
features (5), 457
fiat, 479–80
"flexible," 477–80
free market, 458
future expectations, 447, 453
future of, 435–40
gold (see gold)
ignorance of the future, 447–48
ingots, 466–67
Isaiah, 465–67
just-so-story, 437–40
"liquid," 353
marketable, 180, 407
Menger, 180
Mexico, 456
mints, 457
Mises, 180, 438
narrative, 437–38
non-sovereign, 455–56
paper, 470–72
prices, 461–63
regression theory, 438
reservation demand, 180
shekel, 454–55
Spanish dollar, 455–56
solidus (gold coin), 470–71
stable, 607–8
state sovereignty, 463, 468, 481, 954
value, 459–60, 469–70
warehouse receipt, 486–89
monkeys, 1029
monopoly
Arm and Hammer, 666
cartel, 171
central bank, 442
Coca-Cola, 666
consumers &, 666
copyright, 670–75
cymbals, 666
definition, 645–46
favoritism, 677
God's, 550
innovation &, 663–64
intellectual property, 656–58
laws against, 645–48
money (state), 451, 458, 464, 468, 474

name, 676
natural, 646–47
profitability, 647
resource conservation, 646
Rothbard on, 171
solutions, 648–50
state-created, 663, 665, 677
statute of (1624), 663
supply & demand, 380
time &, 163, 164, 305, 354, 666
trademark, 675–76
uncertainty &, 209
universal, 436
violence (state), 901, 907–9, 974
Montaigne, Michel, 228, 366–67
Moore's Law, 111, 113
moral hazard (central banking), 490
more (preference), 63–65
more is better, 686–87
more (motivation), 64
mortgage, 577, 595
Mosaic law
case laws, 876–77, 881
conscription, 921–24
festivals, 924–27
hermeneutic, 875, 890
kingship, 929–30
predictability, 932–34
public reading, 930
Solomon, 931
taxation, 931–32
warfare, 923–27
written, 930
see also biblical law
Moses (burning bush), 811
mosquitoes, 956
motivation, 393–94
Motz, Lloyd, 1043
movies, 675
multiplication (population), 214–15
murder, 298
music, 673

name
monopoly, 676
private property, 187, 655–54
protection, 655
trademark, 675–76
naming, 177–79
narrative, 437–38
national defense, 918–28
nations, 582, 618–1
natural law theory, 84
natural man, 6, 22, 31
natural resources, 110–12, 117
nature/freedom (Kant)
economists ignore, 84, 125
Mises, 1003–06
tastes &, 356
Van Til on, 91–93
Nazism, 429
negotiation, 346–50, 380–81, 549
Neolithic agriculture, 323–24
Nero, 896
Netherlands, 624
Neusner, Jacob, 821
neutrality
1+1=2, 102
academia, 80–81
biblical law, 452
costs/benefits, 453
economic theory, 21, 77, 452, 988
efficiency &, 77
epistemology, 1014
Friedman, 990
government policies, 452

military, 919
intuition &, 1014
Kuhn vs., 999
methodology, 986
mind/matter link, 1014
Mises, 74, 988, 1002–3, 1007, 1008
myth, 8, 17, 28–29, 73, 78–79, 80
policy/making, 8
Robbins, 989
subjective utility, 453
textbooks, 17
New Age, 1025
New Covenant, 620
New Deal (prices), 385
New World Order (Jesus), 876
Newtonian physics, 102
Newton, Isaac, 600
Nicene Creed, 245, 756, 852
Nisbet, Robert
equality (2 types), 293
metaphor, 237–38
political centralization, 292
predictions, 118
year 2000, 118
Nixon, Richard, 394–95, 921
Noonan, John. T., 889
normal science, 999
noumenal (Kant), 91–92, 1014
nominalism
economic theory, 195
explained, 58, 98
forbidden tree, 98
Marxism vs., 224
Menger, 57–58, 195, 227
policy making &, 209
polytheism, 734
realism &, 57–58, 98, 207, 736
Robbins, 99–100, 250–51
Trinitarianism vs., 736

oasis, 408
oath, 36, 37, 41, 249–50, 393, 416–17
objectivity, 1003
Occam's Razor, 715
Oholiab, 231
Old Covenant, 96
omniscience
equilibrium price, 384
God, 503
illegitimate goal, 148
justice, 905–6
prices &, 205
state, 615
one/many, 245–46, 366, 425, 731–32 (see also Trinity)
on-the-job training, 216–17
opportunity
capital, 546
comprehensive, 843
economic law, 691–92
economic recovery, 605
entrepreneurship, 424–25, 801
eschatology, 600
eternity, 747
exploiting, 696–98
information (market), 506
loss &, 697
Mises, 801
Paul, 804
service, 267–68
value of, 530
wealth, 506, 747
optimism, 605–7, 801–3
organic (metaphor), 447

original sin, 43
origins, 23, 24, 26–27, 123–24, 132–33
output, 59–60, 625–27
owners, 141, 935–36
ownership
  accountability, 51–52
  allocation, 156, 162
  auction, 399
  boundaries, 259
  Coase, 285
  common, 684
  conservation, 298
  corporate, 161
  covenantal, 261
  creation, 130–31, 242–43
  creativity &, 261
  delegated, 49, 53–61, 156–57, 180, 253, 260–61
  discovery process, 508–9
  disownership &, 54, 271–72, 632, 683–84
  dominion covenant &, 241, 261
  economic theory, 283–84
  economic value, 434
  encumbered, 161
  ethics, 185, 259, 283–84
  evaluation, 57
  exclusion, 56–57, 176, 182–83, 259–60
  God, 130–31, 141, 242–43, 253, 681–2
  government, 319
  heirs, 58–59
  honest money, 451
  judicial, 41–47, 43–44, 131
  knowledge, 264, 633–34
  labor, 549–50
  land, 961–64
  legal authority, 42–43
  legal category, 131, 259–60
  Locke's theory, 963
  moral legitimacy, 46
  moving fluids, 953
  name, 177–80
  one/many, 246
  origin, 284
  ox, 634–35
  performance evaluation, 57–58
  plans/results, 430
  pollution, 955
  purpose, 54, 61–62, 241, 434–35
  regulation, 631–34
  responsibility, 160–61, 181, 241, 635, 654
  representation, 49, 161
  responsibility &, 259–60, 511, 635–37, 681–83
  roads, 965–69
  Satan, 296
  Second Person, 243–44, 251
  self-, 49, 179–80, 187
  social function, 161
  sovereignty, 212
  specialized knowledge, 181
  structure, 40
  theocentric, 251
  Trinitarian, 246, 735–36
  trusteeship, 48–49, 259, 682
  violence &, 965
  wisdom, 59
  ox, 634

paper money, 471–72
parables, 265, 286, 781 (see specific parables)

Pareto, Vilfredo, 117, 616–17, 783, 791
Paris, 425
Parmenides, 67, 101, 240
Parmenides/Heraclitus
  ceteris paribus, 356–57, 693
  dualism, 89–90, 217
  ethics, 198, 240
  mathematics, 100–2
  mechanism/organic, 240
  Mises, 999–1000
  statistics, 206
  summary of this dualism, 217
patents
  arbitrary limit, 666–67
  China, 669
  decentralization vs., 669
  enforcement, 667–69
  Hippocratic oath, 662
  lawsuits, 665, 668
  open source, 669
  physical production, 668–69
  statute of monopolies, 663
  Venice, 662
  Watt, 664
Paul
  appeal to Caesar, 897–98
  authorities, 895–98
  calling, 813
  contentment, 797–808
  creation/providence, 132
  eschatology, 107–8
  feasts, 925–26
  hope, 805–6
  mind of Christ, 96–97
  optimism, 804
  peace, 900
  providence, 800–1
  state, 895–98
  suffering, 805
  tent maker, 812
  ups and downs, 798–99
  vision of victory, 800
Paul, Ron, 938
peace, 901–2, 913
pencil, 738
Pentateuch (covenant model), 20, 36, 38
people prefer more, 347, 351, 361, 434, 436
perfection, 145–46, 954
performance, 189, 190
perpetual motion, 858
persuasion, 234–35
Peshita (Bible translation), 875
pessimism, 1018, 1045
Peter, 810
Pharaoh, 422–23, 560, 563
Pharisees, 432, 832-33
phenomenal, 91–92
Philemon, 886
Philistines, 512–15
philosophy
  Marx, 8–9
  neutrality myth, 17
  Paul on, 5
  Plato, 90, 880
  Socrates, 880
  textbook, 17
  Van Til, 5
  see also Kant, Parmendes, Van Til
physicians (overcharging) 417–18
physics, 234 (see chapter 41)
pietism, 982, 2020-21
Pigou, A. C., 703
Pilate, 82

pin factory, 338–39
pin-makers, 336–37, 339, 342
plagiarism, 655–56
plan reconciliation, 143, 421–30, 504–5
planning
  costs &, 157–58
  ethics, 424
  inescapable concept, 429
  Joseph, 422–23
  multiplication, 214–15
  priorities &, 55–56
  purpose precedes, 34, 54–55, 136, 141, 214
  responsibility, 429
  sovereignty, 339
Plato, 90, 880
plow, 9
pocketbook parables, 145
political envy, 751–52
politics, 287, 292, 287, 413–14, 978–79
policy-making
  economists, 75
  Harrod, 7–8, 100
  interpersonal comparisons, 58
  intuition &, 453
  morality &, 46
  nominalism, 195, 207
  Knight, 76–77
pollution
  control, 950–51
  fluids, 952–53
  ownership &, 955
  victim's rights, 951–52
  wandering animals, 951–52
  zero (price), , 953–54
polylogism, 369
polytheism, 734
poor in spirit, 211
Pope John Paul II, 870, 890–91
population
  agriculture, 571
  Canaan, 313
  dominion, 271
  growth, 45–46, 112, 116, 214–15, 507, 885
  inheritance, 214–15
  limit to growth, 116, 125, 540–43
  migration, 542–43
  multiplication, 540–41
  pre-fall, 542–43
  thrift, 215
  United States, 543
possibility, 310–11
postmillennialism, 116, 208, 599–600, 606, 755–56
Potiphar, 421–22
poverty
  defined biblically, 855
  elimination, 326–27, 606, 623
  ideal of, 72
  protectionism &, 377
power, 255, 784, 916, 998,
power religion, 1019–20, 1024
Poythress, Vern, 100–3
pragmatism, 986–87, 1000
praxeology, 74
precedents (legal), 638, 651
predestination, 54, 213
predictability
  contracts, 520–21
  covenantal, 278, 520
  ethics, 424, 523
  God, 514
  impersonal markets, 505–6

insurance, 517
law, 915, 431, 932–34, 945
market process, 522–23
providence, 192
sanctions, 218
Satan vs., 279
science (Kant), 28
predictions, 992, 997–98
premillennialism, 107
present, 534–35
presuppositions
academic, 23, 26–28
autonomy, 23–24, 47, 119
Christian thought, 4–5
concealed, 126
creation, 125
economics, 31–32
epistemology, 83
evolution, 24
implicit, 23
irreconcilable, 23
Mises, 1003–4
neutrality, 28–29
origins, 24–26
Van Til, 20, 23–24
price competition, 413–14
price controls, 460–61
price curve, 647
price system, 445–46
prices
allocation, 426
bidding, 63
capital formation, 442
central planners, 430
clearing, 381–82
competition, 410–11, 413–15, 448
continuity, 440–42
coordination, 63
costs, 66, 329–30
demand &, 203
dots (graph), 709, 713
economic value, 199–204
efficiency, 329–30
empirical content, 310
equilibrium, 205
eschatology &, 205, 208
eternal, 300–1
falling, 461–63, 627–29
flexible, 384
formation, 269–70, 351, 407, 504
ideal, 205–6
ignorance &, 553
information, 63, 329–30, 435–36
labor services, 551–54
limits revealed, 329–30
markers, 208, 429
market-clearing, 384
negotiation, 380–81
no explanations, 427
objective, 63, 205, 436
omniscience &, 205
organizations (internal), 170–71
priestly service, 415–18
quality &, 408–11, 419–20
Say's Law, 382–85
theory, 208, 709
value &, 194–204, 208, 310
yesterday's, 479
pricing, 201–2, 205–6, 269–70, 552–54, 566-69
pricing (priestly), 415–18
print on demand, 678
priorities
budgeting, 167, 174
framing, 356
goals, 165

God's, 166, 270
marginal utility, 358–60
numerical/ordinal, 56
organizations, 168
prices &, 63, 65, 410–11
resources, 56, 157
scale of values, 162
structure planning, 55–56
subjective, 166
tastes, 167, 355
prison, 882–83
private property
affirmation, 548–49
biblical law, 653
contracts, 684
courts, 653–54
ideas, 655
identifiable asset, 654
inheritance, 211
innovation &, 507–8
judicial boundary, 654, 656–57 (see also boundaries)
legitimate, 405
market order, 447
name, 654–55
responsibility &, 509–10
state defends, 785
theft, 665
trail of title, 657
product reviews, 649
production
dominion covenant, 629
efficient, 324–26
goods, 566–68
kingdom of God, 224
mass, 326
mix, 701
thrift, 224
productivity
capital &, 554–57
free trade, 365
knowledge, 436
legitimate, 152
results, 218–19
service &, 211–12
profit/loss
bureaucracy vs., 790, 935, 943
disownership, 271
division of labor, 393
economic causation, 522
economic law, 695–96
efficiency, 212
entrepreneurship, 218–21
final judgment, 145
garden, 44
inheritance, 212
Mises, 219–20
planning, 65
price signals, 304
sanctions, 7, 183–85
tree, 43
profit management, 937–38, 942–43
progress, 155, 599–601
promises, 577–78, 605
property
benefit, 303
delegated, 179–80
discovery process, 508–9
intellectual, 654–79
legal claim, 261
name &, 187
origin, 43
protection, 151
public, 298, 319
property rights

biblical law, 151
boundaries, 179–80, 226–27, 963–64
discovery process, 509
entrepreneurship, 509
judicial, 187
name, 180
origin, 633
truteeship, 187–88
violence &, 962
whose?, 658–62
protectionism, 338, 362–72 (see also free trade)
providence
autonomy, 133
Bastiat, 426
causation, 94, 105
continuity &, 134
cosmic personalism, 240
dominion, 576
epistemology, 132
God's purpose, 23, 24, 16, 124–24, 132–33
Job, 134
metaphysical, 132–35, 226
predictability, 192
science, 134
psychology, 355–57, 804, 1009–10
public speaking, 234
public utilities, 647, 960–75
Puritanism, 600
Puritans, 320
purpose
action, 55–56, 132–33, 134–37, 233, 710, 722
analytical category, 135–38, 226
authoritative, 147
continuity (God/man), 136
cooperation, 151
cosmology, 136
creation, 140, 142–43, 212–13, 242
Darwinism, 137
dominion, 149
dominion covenant, 142
economic theory, 123
eschatological, 153
eternal, 134
goals, 226
God-man link, 136
God's, 141–49
history's structure &, 213
humanism, 137–38
individual, 145–49
inheritance, 153
key category, 132
kingdom of God, 149
mammon, 136, 149
Mises on, 55, 145–46
original, 47
owners, 435–36
ownership, 54, 62, 241, 434–35
planning &, 54–55
posthumous, 152–53
preceded creation, 142–43
precedes planning, 34, 55–56, 136, 141, 214
redemption, 143–44
social theory, 136
subjective, 62
subordinate, 136–37, 144
theocentric, 149
"thumb," 226
wealth, 151
purposelessness, 133, 802

quality/price, 408–11, 419–20
quarantine, 956–58
Queen Elizabeth I, 670
questions (copywriting), xiii–xiv
questions before a project, xi

Rachel, 823
railroads, 543, 969
randomness, 514
Rankine, W. J. M., 1034
ransom, 829–30
rationalism/irrationalism, 997
raw materials, 265
Read, Leonard, 236
realism, 58, 98, 207, 224
realism/nominalism, 57–58, 98, 207, 736
reason
  chains, 255
  deductive, 999–1011
  Hayek, 991
  inductive, 991–99
  intuition, 947
  Mises on, 105
  neutrality, 27–28
  wages, 553–54
recipe, 657
reconstruction of economics, 3
redemption
  bought back, 213
  capital, 213, 546
  categories, 129–30
  comprehensive, 257, 278, 841
  corporate, 152
  counterfeiting, 489
  creation &, 144
  exchange, 213–14
  heathen slaves, 885
  individual, 152
  Jesus, 244
  pre-creation, 142
  progress, 278
  scarcity, 622
  souls, 213–14
  Student's Edition, 129
  time, 355
  world, 278
redistribution
  ethics, 286–87
  inescapable concept, 278
  market process, 279
  political, 280, 401
  theft, 278–79
  universal, 295
  USSR, 281
  violence, 277
  welfare political, 287
  welfare state, 280
reform, 227
regression theory (money), 438
regression to mean, 60, 186
regulation
  agency capture, 640
  arbitrary, 637–39
  assumption behind, 651
  barriers to entry, 638–39
  bureaucracy, 635–40
  committees, 637
  justification, 651
  licensing, 642–45
  Mosaic law, 648
  precedents, 638
  ownership, 631–34
  quarantine, 959
  reduced choices, 652
  trade associations, 639–40

reincarnation, 1043
Reisman, George, 968
Renaissance, 660
Renaissance man, 182, 343–44
rent, 180, 355, 503, 539–47
representation
  business, 330
  graph, 716
  Jesus, 242–43
  judicial, 42
  ownership, 49
  point 2, 161
  redemption, 144
  statistics, 208
  trusteeship, 49, 249
reservation demand, 557–58
resource output, 317
resources, 357–58
responsa (Judaism) 651
responsibility
  Adam, 254
  authority &, 386
  avoiding, 60
  capital, 533, 546
  computer programming, 232
  corporate, 161
  covenantal, 147, 620
  dominion &, 508
  dominion covenant, 361, 909
  disownership, 684
  economic theory, 722
  escape from, 1022
  eternity, 749
  ethics &, 59, 704
  exchange, 271–72
  final judgment, 705
  free will, 1010
  increased, 60
  individual/corporates, 161
  initial distribution, 254
  Kant, 92
  knowledge &, 434, 635–37
  legal, 232
  legal tithe, 263–64
  multiple, 193
  name, 177, 654
  no escape, 395
  ownership &, 161–62, 181, 241, 259–60, 511, 635, 654, 682–83, 737
  personal, 232
  plans, 429
  private property &, 509–10
  ratchet, 627
  resource allocation, 173
  robots, 232
  specialized knowledge, 263
  talents parable, 527
  transfer, 271
  wealth &, 361, 682
  wisdom &, 255
  zone, 182–83
rest, 762–63, 767, 865
restaurants, 764
restitution, 655, 880–82
resurrection (humanism), 1040–43
Reuss, Henry, 478
revelation, 19–20, 302
reversion to the mean, 60, 186
revolution, 293, 607
rhetoric, 234–35, 280
Ricardo, David, 314
rich farmer, 51
rich young ruler, 782–83, 789
Rifkin, Jeremy, 1025–26
risk, 172, 514–18, 526, 533, 593

rivers (Eden), 542–43
roads, 966–71
Robbins, Lionel
  choice, 56, 984, 988–89
  economic theory, 987
  Harrod vs., 7–8, 75
  imputation, 250–51
  moralism, 990
  neutrality, 989
  nominalism, 99–100
robots, 115, 232
Rockefeller, John D., 786–87
Rogge, Benjamin, 787
Roman Empire, 432–34, 926–27, 970, 973
Roman numerals, 594
Röpke, Wilhelm, 403
Rothbard, Murray
  bank reserves, 609
  calculus, 710–13
  cartel (one), 171
  Crusoe, 335
  efficiency, 332
  eminent domain, 967–68
  equations, 718–19
  gambling, 518–19
  graphs, 712–14
  mathematics, 715
  monopolies, 171, 663
  national defense, 920
  one cartel, 171
  physics, 710–12
  self-ownership, 179
  treatise, 235
rulership, 833
Rushdoony, R. J.
  career, 819
  Gnosticism, 1021
  hired me (1963), 23
  indentured servitude, 880
  rustlers, 6, 31
  seminars, 5
  wide rope, 6
Russell, Bertrand, 1044–45
rustlers, 6, 31

Sabbath, 742, 758, 862–63, 866, 868
sabbatarianism, 76
sabbatical year
  conquest, 863
  debt forgiveness, 863–64
  judicial foundations, 871
  land law, 766, 863–66
  Levites, 871–72
  New Testament, 866–68
  not honored, 765–66, 863
  post-exilic, 872
Sadducees, 832–33
salesmanship, 341
Samuelson, Paul, 281, 335–36, 338, 726–29, 1011
sanctification
  church, 829
  corporate, 191
  ethics, 97, 191
  progressive, 97, 147, 1016
  sanctions &, 867–68
  three stages, 97
sanctions
  causation, 522
  covenant theology, 521
  economic theory, 521–22, 743
  entrepreneurship, 218–21
  free market, 304
  inheritance &, 572

leadership &, 386
market process, 428
point 4, 190–91
positive, 282
predictable, 218
profit/loss, 183–84
righteousness, 226
sanctification &, 867–68
social theory, 276
state, 899, 900
Satan
Christ &, 277–78
Eve &, 274
Job &, 273–78
market process, 279
Mises on, 1003
motivation, 274
ownership claims, 296
predictability &, 279
redistribution, 274–75
temptation, 61, 144, 225, 271–78
wealth transfer, 274–75
welfare state, 280
saving
capital, 562–63
economic growth &, 564–66
entrepreneurship, 566, 570–71
post-1800, 565
wealth &, 568
see also thrift
Say, J. B., 382–85
scale of values, 56, 162, 180
scarcity
auction process, 541
biblical concept, 299–301
blessing, 298–99
boundaries, 183–84
choice, 311
costs &, 65–66, 297–312, 436
cursed, 151, 184, 298, 311, 564
economizing &, 354
eternity &, 301
finitude, 151, 163, 299
growth vs., 66–67
humanistic economics, 97
knowledge, 300
land, 313–14, 315–16
limits, 321
lunches (free), 685
overcoming, 184
peace, 298
pre-fall, 297, 354
redemption, 622
Smith, 47
starting point, 47, 185
technology, 317
time, 297
Schlossberg, Herbert, 784
Schmoller, Gustav, 991
scholar, xii, 817–20
Schumpeter, Joseph, 314, 986, 1013
science
art &, 232–34
authority, 1019
gadgets, 1019
God's laws, 14–15
meaning of, 980
normal, 999
obsolescence, 979–80
vocation (Weber), 979–81
worldview &, 1025
scientific guild, 235
search costs, 181–82, 502–4
Sears, Roebuck, 570
Sebba, Gregor, 997–98
secrecy, 437

seed parable, 108–9
self-interest
  Bastiat, 425
  casuistry, 357
  charity, 782–83
  coordination &, 392–94
  economic theory, 521
  ethics &, 77
self-love, 393
self-ownership, 49, 187
sellers, 382, 406–7, 411
Septuagint (Bible translation), 874–75
servant, 822, 825
servants (unprofitable), 282
service
  banking, 592–96
  cooperation, 419
  customers, 64, 283
  economic opportunities, 267–68
  future-oriented, 216
  Jesus, 419
  market process, 388–96
  mutual, 392
  opportunities, 267
  ownership, 682–83
  profit &, 211–12
  purchased right, 267
  rulership, 833
  social continuity &, 752
  success, 394
  wealth &, 801
services, 542–44
servitude (modern), 879–80, 882–83
Shaffer, Butler, 674
Shechem, 244
shekel, 454–55
shells, 399
siege, 378–79
silver, 465–66
Simon, Julian, 110
Sisera, 922
Skousen, Mark, 184–85
slavery
  A.D. 70, 875–76
  aliens, 883–86
  bondservice &, 887
  case laws, 876–77
  church history, 876
  damnation &, 886–87
  debt, 856
  ears pierced, 875
  Egypt, 877
  Greece, 879–80
  hell &, 886–87
  humanism's silence, 888
  intergenerational, 875–76, 883–86
  Jesus, 875–76
  legal, 550
  Mosaic, 878–79
  intergenerational, 883–86
  progress, 883–86
  perpetual, 886
  Philemon, 886
  redemption, 885
  restitution, 880–82
  Satan, 878
  Rome, 888
  servitude, 977–78
smartphone, 327
smelters, 451, 566–67
Smith, Adam
  anti-Christian premise, 352
  baker, 267–68
  competition, 150

consumption, 326, 331, 352, 358
cooperation, 267–68, 390–92
coordination theory, 392–93
division of labor, 246–47
economic growth, 97
ethical legacy, 614–16
free trade, 152
frugality, 615
great insight, 149–50
harmony of interests, 263
Invisible Hand, 7, 236
language's origin, 262
mammon, 741
Marx &, 725–26
mistakes, 247
modern economics vs, 207
protectionism, 390–92
pin-makers, 336–37
purpose, 145–50
scarcity, 47
self-love, 393
service => wealth, 149, 392
Turgot &, 314
wealth, 150
Smith/Jones (tariffs), 369–71
sociology, 722
social continuity, 441, 752–56
social cost, 285
social Darwinism, 25
social evolution myth, 323–24
social gospel, 229
social insurance, 784–85
social theory, 5, 68, 132, 136, 139, 424, 621
socialism, 49, 279–80, 429
society, 64, 216
sociology, 722
Socrates, 880
Sodom, 348
soul, 316
solidus, 470–71
Solomon, 362–65
something for nothing, 467–69
sooner, not later, 532–33, 698–99
sovereignty
by default, 138
covenant-keepers, 760
collective man, 133
consumer, 79
cosmos, 25
creation &, 55, 123, 130
derivative, 260–61
God, 25, 42, 53, 79, 122–24, 129, 130, 191–92, 347, 365
humanism, 124
judicial, 42
legal category, 79
origins, 24, 26–27, 123–24
original purpose, 47
ownership, 212
purpose &, 137
planning, 339
point 1, 122–23
seller's, 689
social theory, 226
state money, 477
Soviet Union (see USSR)
sow/reap, 527–28
Sowell, Thomas, 66, 685
Spanish dollar, 455–56, 608
specialization
attention, 331
banking, 593–94
biological, 266
business, 325–26
charity, 795–96

consumption, 331
coordination, 246–47
division of labor, 542–43
efficiency, 330–31
factors, 266
free trade, 364, 376
information, 428
knowledge, 181–83, 266, 333–34, 342
labor, 554–56
ownership, 182
supply & demand, 379
temple, 364
vulnerability, 570
Stalin, Josef, 255
standards, 198–99
state
adultery, 913
boundary violations, 948
charity, 785
conquest, 962
constitution, 655
contracts, 910–12
cooperation with, 916
copyrights, 670–75, 677–79
counterfeiter, 482, 910–12
fire, 957
fire control, 949–50
free market &, 901, 973–74
idea, 655–56
insect abatement, 955–56
intellectual property, 654–79
jurisdiction, 908
justice, 655, 900
land ownership, 965
legitimate, 895–98, 899–902, 908, 972–73
market's subordination, 901
Mises on, 900–1, 914–15, 920–21, 940
monetary sovereignty, (see state-issued money)
monopolies, 663
omniscience, 615
patents, 660–69
peace, 901–2, 913
pollution control, 950–55
private property, 785
quarantine, 956–58
redistribution, 655
regulation, 959
Romans 13, 895–98
sanctions, 899, 400
society &, 216
statistics, 615
trademarks, 675–76
violence, 972
wealth creation, 655
state-issued money
counterfeiting, 482
debasement, 468
"flexible," 477–80
gold standard, 472–77
hyperinflation, 480–81
inflation, 481–82,
inflation tax, 469–70
paper money, 471–72
solidus, 470–71
state of nature, 963
statistics
God's blessings, 612–13
Great Depression, 733
imputation, 206
insurance, 515–18
objective, 615
Philistine priests, 513–14

regression to mean, 616
risk, 515–16
understanding, 515–19
steward
ethics, 158–59
lazy, 528
inheritance, 82--35
unfaithful, 158–59, 173–74
parable of the talents, 49, 145, 152–53, 173–74, 211, 524–28, 589–92, 839
stewardship
allocation, 530
bride price, 835–38
comprehensive, 216
hierarchy, 244
judgment, 530
judicial, 60
laws, 53–61, 141
ownership, 53
parable, 524–26
trusteeship &, 54
Stigler, George, 74–75, 990
stock price, 310
stoicism, 797–98
stones into bread, 67, 317
structure of production, 566–70
subatomic physics, 101–2
subjectivism, 75–76, 100
subordination, 144
success
bankruptcy &, 803
barn-builder, 71
covenantal, 619–21
ethics &, 79, 723, 725, 841
economic, 815
indicators (see success indicators)
service motive, 228–29, 394
visible, 619–21
success indicators, 790–92
succession
Christian economics, 185
creation week, 248–49
dominion &, 221–22
trustees &, 210–11
trusteeship, 52
suffering, 799
sunk costs, 309
super rich, 751--52
supply/demand
auction, 379–81
autonomy, 384
division of labor, 379
economic law, 689–90
flexible prices, 386
forecasting, 381–82
Keynes vs. Say, 383–84
marketplace, 380
money, 380
negotiation, 380–81
Say's Law, 382–85
seller, 380–81
siege, 378–79
specialization, 379
unified concept, 384
Sutton, Ray, 37, 913
sweat, 298
Switzerland, 919
sword, 44

Taleb, Nassim, 637
talents/minas, 49, 145, 151–53, 157–59, 173–74, 211, 324–28, 524–28, 589–92, 839
Talmud, 833
tariffs, 368–76

tastes, 167, 301, 355–57, 359–60, 716
taxation
  Egypt, 561–62,931–32
  graduated, 703
  inflation, 469–70
  Israel, 931–32
  leisure, 559
  limit, 901
  promises, 946
  Roman, 432–34
  Samuel's warning, 901
  tithe principle, 944–45
teacher's task, 703
technology, 317, 677
telegraph, 266, 622
temple, 362–65
temptation
  Adam, 43, 44–45, 53, 122
  knowledge, 262
  Satan's, 144, 277–78
  theft, 278, 296
  wealth, 148
tent makers, 812
terror, 294
textbooks
  committees, 2
  central bank cartel, 492–93
  Darwinian, 25, 93
  economic categories, 241
  economic laws, 61, 703
  economic scarcity, 184–85
  epistemology (silence), 27, 41, 93
  foundational questions ignored, 27
  humanistic, xii
  Keynesian 727
  man as god, 124
  micro/macro, 728
  pseudo-neutrality, 17, 75
  sequence varies, 234
  short-lived, 2
  thermodynamics, 1027–29
  treatises vs., 1
The Octopus, 408
theft
  Adam, 254
  archetypal sin, 275
  God prohibits, 42–43
  ideas, 665
  multiplication &, 215
  prohibited, 175
  Satan's temptation, 278
  temptation, 296
  tree, 227
  trustee, 52
  wage controls, 400
  value-added, 224
theology (applied), 4
thermodynamics, 1027–29
thing not seen, 640–42
Thirlby, G. F, 309–11
thirteenth amendment (slavery), 655
Thompson, William, 1,034
thrift, 222, 224 (see also saving)
timbers, 362–65
time/money, 164, 700–702
time
  bargaining, 183
  budgeting, 164–65, 328
  calculate, 776–78
  calling, 117
  capital development, 264
  charity, 795
  death &, 164–65

defined, 769
endless, 1039
eternity, 199
final judgement, 317
limit to growth, 109, 115–17
money &, 163, 164, 305, 354
non-linear, 1035
nonrenewable, 183
orientation, 575–77
redeeming, 355
saving, 183
scarce, 297
spare, 117
wasting, 183
time preference, 532
time's arrow, 1041
timelessness, 358–59 (see also Parmenides)
tithe
Abram, 347–48, 770
anti-autonomy, 842
calculate, 776–78
charity second, 794
Christian, 773–76
corporation, 77–78
covenantal, 779
defined, 769
first, 794–95
gross vs. net, 776
inheritance, 771
Jacob, 771
moral obligation, 778
priestly, 772–73, 774–75
rabbinic, 773
robbery &, 772
rural, 770
taxation, 944–45
ten percent, 769
trail, 657
windfall, 531
tomorrow (optimism), 747
touchstone, 469
tower (constructing), 157
Tower of Babel, 143, 247, 439
trade associations, 639–40
trade, 363–64, 542 (see also free trade, protectionism, tariffs)
trademark, 675–76, 679, 910–12
tradeoffs, 162–71
tragedy of the commons, 318–20
transcendence (God) 18
transportation, 542–43
travel, 413
treasure (heaven) 72
treatise, 1–4, 27, 28
tree (forbidden)
boundary, 43, 57, 98, 175–76, 654
communion meal, 45
covenant, 35, 45, 260
ethics at center, 253, 259
God's property, 43, 57, 151, 176
judicial temptation, 44, 98
escaping finitude, 45, 149
post-temptation, 45
profit/loss, 44
realism/nominalism, 98
specialized knowledge, 254
stewardship/trusteeship, 264
theft, 258, 278
tree of life, 44–45, 254, 278, 283, 970
trees, 35, 45, 264
tribulation period, 754
Trinity
action, 161
Christian economics, 143

division of labor, 333
equality, 245
hierarchy (economic), 245–46
imputation, 168
micro/macro, 731–32
Mises, 1009
one/many, 245–46, 425, 731–32
ontological/economic, 245–46
ownership, 246, 735–36
plan reconciliation, 143
social theory, 5, 424
starting point, 68
trumpets, 918
trust, 176, 468
trust (legal), 50, 52
trustee
accountable, 51–52, 189–90
authority, 49–50
fiduciary, 250
Jesus, 50
owners, 48–49
succession &, 210–11
thief, 52
trusteeship
contracts, 250
inheritance &, 211
judicial, 45
God's name, 48
guardianship, 54
imputation, 51
motivations &, 55
ownership, 48–49, 141, 259, 682
property rights, 187–88
stewardship, 49–50, 54, 259
successions, 52
welfare state vs., 50, 52
truth, 95–101
Turgot, Jacques, 314
turn the cheek, 851
Tversky, Amos, 235
Tyler, John, 413
tyranny, 216

Uhr, Carl, 88–89
uncertainty
employment, 502
entrepreneurship, 517, 522–25
mathematics, 367
money &, 209
risk &, 172, 528, 593
statistics, 517
uneasiness, 148, 804–5
unemployment, 118, 557
United States (population), 543
unintended consequences, 641, 694–95
urbanization, 969–70
USSR, 9, 111, 216, 280–81, 897
usury, 847, 861
utilitarianism, 351–52
utility, 702
utopianism, 974

valuation, 100, 192–95, 200, 400 (see also imputation)
value
added, 204–5 , 215–16, 223–24
criteria, 224
ethics/economics, 197–99
imputation &, xii, 199–204
kingdom of God, 196
labor theory, xii
ordinal, 56
price &, 199–204, 208, 310
scale, 56, 162, 180
subjective/objective, 180–181, 200–4

theory, 227, 558
utility &, 702
value-free economics, 73–74
value/price dialogue, 202–4
value theory, 227, 558
Van Til, Cornelius
Adam, 16
apologetics, 23–24, 84
atomism, 996
autonomy, 1015
beads/string, 996
Christ, 16–17
circular reasoning, 6
common ground, 16, 84
creation, 14–15
Creator/creature, 16–17, 26, 123
epistemology, 995–96
gift of logic, 105
humanism, 14–17
intuition, 996–97
Kant, 89
methodology, 996–97
natural man, 31
Parmenides/ Heraclitus, 999–1000
philosophy, 5
presupposition, 20, 23–24
revelation, 20
revolutionary apologist, 84
rewritten, 17–18
starting point, 16
system of man, 105
Van Wylen, Gordon, 1043–44
variable properties, 314–15, 701–2
victims, 880–82
victory (vision of), 799–800
Viner, Jacob, 985
violence, 277, 907–9, 962, 964, 972
virtuoso, 232
vocation, 977–81

wage controls, 400
wages, 552–53, 556, 559
wandering animal, 951–52
Ward, Barbara, 110
war trumpet, 918
warehouse receipt, 486–89
warfare, 923–27
waste, 183, 206, 325, 358, 404
water (plants), 314–15
waterfall, 58
Watt, James, 664
wealth
attitude toward, 72
autonomous, 73, 124, 255, 747
choices &, 578
covenantal sanction, 206, 840
covenantal status, 615–16
display, 625–26
division of labor, 301
dominion, 92–93
exchange, 340–41
free trade, 150
hierarchy, 789
high wall, 788
imputed, 206
increasing, 591
inequality, 289
knowledge &, 262–63
legitimate, 151, 152
leisure, 626
Lord's day &, 767
mammon, 135–34, 837
objective/subjective, 206
per capita, 45, 59
posthumous, 783

power &, 784
pyramid, 793–94
quest for, 78
redistribution, 226–27, 401
rent &, 547
responsibility &, 360, 682
saving &, 568
service, 683, 801
Smith, 741
statistics, 206
stewardship parables, 781
tastes &, 359–60
temptation, 148
temporary, 72
tithe, 795
transfer, 595
transfer (eschatology), 196
trusteeship, 49
trust in, 783
way to, 615–16
weapons (free trade), 372
Weber, Max, 93, 940–42, 977–81
wedding, 396
weeds, 108–9
weights/ measures, 450, 451, 463
Weiskopf, Walter, 986
welfare economics (Pigou), 703
welfare state
dangerous, 785
envy & jealousy, 290–91
immoral, 201–2, 291–92
moral appeal, 295–96
quarantine, 958
satanic, 280
trusteeship vs., 50, 52
World War I, 945
wheat/weeds, 752–54
White, Lynn, 660
"who says?" 24
Wigner, Eugene, 10, 9, 100, 104, 994
Windelband, Wilhelm, 93–94
wine (wedding), 396–96
wisdom
capital, 161
inheritance &, 211, 843
responsibility &, 255
Solomon, 22
value of, 435
Wong (free trade), 370–71
work, 105, 977
worldview (science), 1024–27
World War I, 587, 728,
World Wide Web, 118
worry, 165
wrath to grace, 257

"you," 685
YouTube, 673

Zebedee, 555
zero-sum game, 750
zip codes, 581–82
zones of ignorance, 437